

105954

ORIGINAL
[Red]

APPENDIX F - GEOPHYSICAL INVESTIGATIONS

000512

**Seismic Refraction Report
for
ICF/SRW Associates
Dorney Road Landfill
Project 30527-012**

February 8, 1988

vibra-tech engineers, inc.

000513

FEB 12 1988

Seismic Refraction Survey

ICF/SRW Associates
Dorney Road Landfill — Project 30527-012
Lehigh County, Pennsylvania
February 10, 1988

Introduction

A seismic refraction survey was carried out by Vibra-Tech Engineers at the Dorney Road Landfill Site in Lehigh County, Pennsylvania. The survey was authorized by ICF/SRW Associates and the field work was carried out between December 21, 1987 and January 9, 1988.

The purpose of the survey was to provide subsurface, geological information as part of ICF/SRW Associates ongoing geotechnical study at the Dorney Road Landfill Site.

Scope and Conditions of Study

A total of 11,270 linear feet of seismic profiling was completed for this project. 5980 l.f. of profiling was done around the perimeter of the landfill, and 5290 l.f. was done within the landfill site.

Standard shallow seismic refraction techniques were used for this survey. A twelve channel, EG&G Geometrics Model 1225 seismograph was used to record the field data. A small amount of explosives was used as the seismic energy source. On each of the traverse lines, spreads of twelve geophones, with twenty-foot spacing between geophones, were placed along the ground surface. At the beginning, middle and end of each spread, and at 115 and 135 foot offsets from either end of the spread seismic energy was transmitted into the ground. The travel time of the seismic energy, from the source point to each geophone, is stored in RAM memory, and then printed out on an electrostatic printer contained in the Model 1225 system. The twelve geophone was then moved ahead along the traverse line, the last geophone of the previous spread becoming the first geophone of the new spread. This process was repeated until the end of the traverse line was reached. Photocopies of the raw field data is enclosed in the appendix of this report.

Limitations of Survey

Geophysical methods are indirect methods of subsurface investigation subject to both natural limits and interpretational errors. Vibra-Tech Engineers does not guarantee that the interpreted subsurface conditions will completely coincide with the geological conditions that actually exist.

One limitation of the seismic refraction method is that the compressional wave velocity of groundwater (5000 ft./sec.) is similar to that of some types of weathered rock. Unconsolidated soil materials located below the water table will appear to have the same velocity as weathered rock. Boring and test pit information is needed to supplement the seismic surveying in order to identify the nature of the 5000 ft./sec. material.

Under certain circumstances a subsurface layer may not be detected by the seismic refraction method. One instance would be the inability to detect a velocity inversion. A velocity inversion is when a lower layer has a lesser seismic velocity than the overlying material. An example of this would be a soft shale which underlies a hard sandstone.

000514

The interface between the sandstone and the shale could not be mapped. The seismic refraction method will only map those layers which become progressively harder with depth.

Another instance where a subsurface layer may not be detected is when this layer has insufficient velocity contrast or insufficient thickness, with respect to the overlying and underlying materials. This situation is called a "hidden layer" in the geophysical literature. Correlation of the seismic data with drill hole logs will normally identify the presence and thickness of these layers. Hidden layers are often indicated on the seismogram by analyzing second and third arriving events.

Results of the Survey

The recorded seismic data was analyzed using two methods. The two methods used were SIPT (Seismic Interpretation Program), a ray tracing program developed by the United States Geological Survey and the Generalized Reciprocal Method.

The seismic velocity is a direct measure of the strength, hardness, and degree of compaction of the material. Unconsolidated soil overburden would have a low velocity (1000-2000 ft./sec.), whereas hard, unweathered bedrock would have a high velocity (10,000 ft./sec.).

The results have been presented in cross-sectional view and can be found in the appendix of this report.

We have classified the following material types from the seismic profiles in terms of seismic velocity.

Seismic Velocity (ft./sec.)	Description of Material
1000-2500	Dry, unconsolidated soil overburden.
3000-4000	Highly weathered and decomposed rock containing soil and rock pinnacles, irregular top of rock surface.
4500-5100	Groundwater.
6400-7500	Moderately weathered and fractured bedrock.
8200-9900	Slightly weathered and fractured bedrock.
10,000-15,000	Unweathered bedrock.

Respectfully submitted,

VIBRA-TECH ENGINEERS, INC.

Douglas Rudenko

Douglas Rudenko
Geophysicist

J. W. Reil

James W. Reil, CPGS
Senior Vice President

000515

Appendix

000516

vibra-tech engineers, inc.

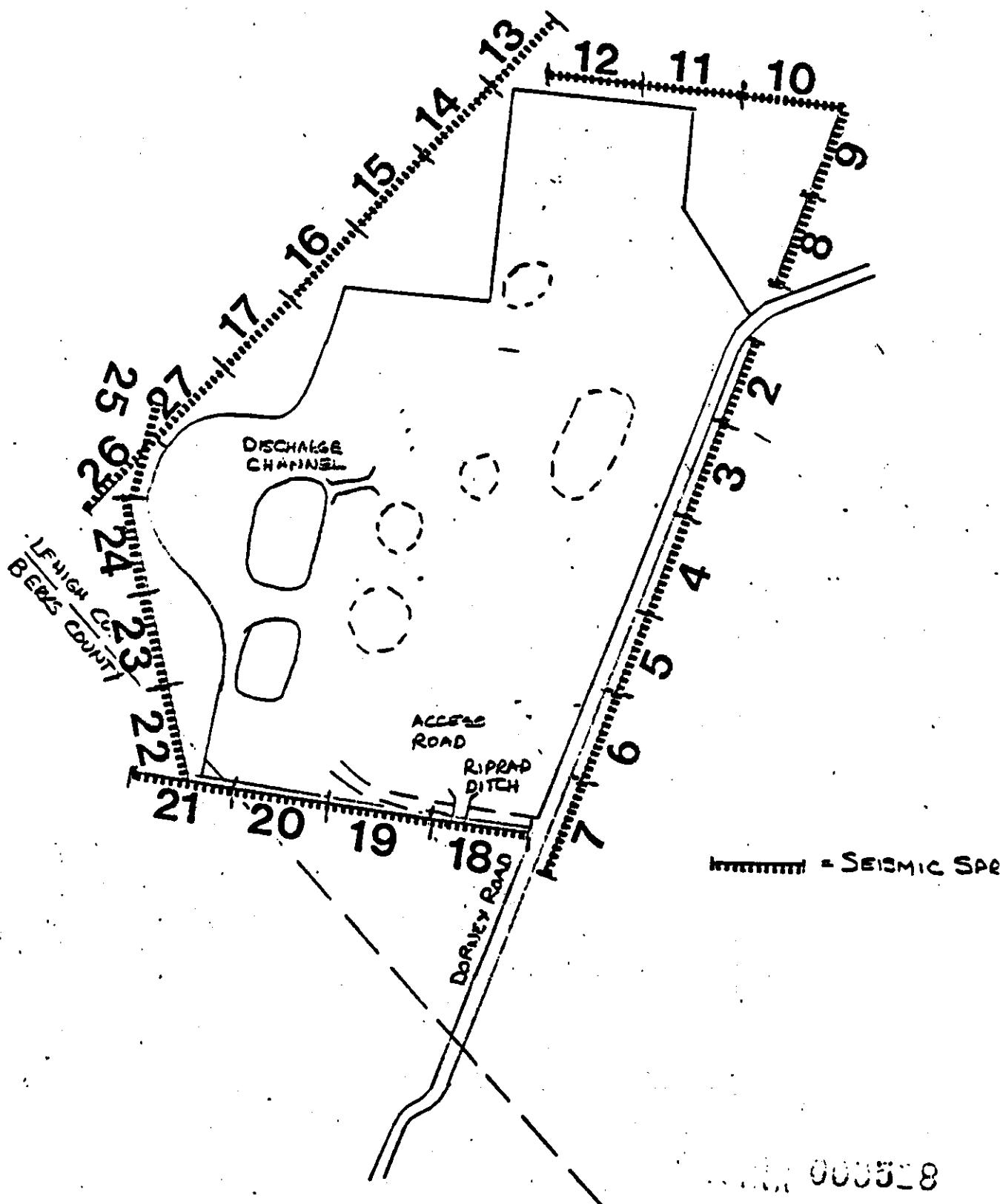
ADAM MERIZ ESTATE

000517

AR000517

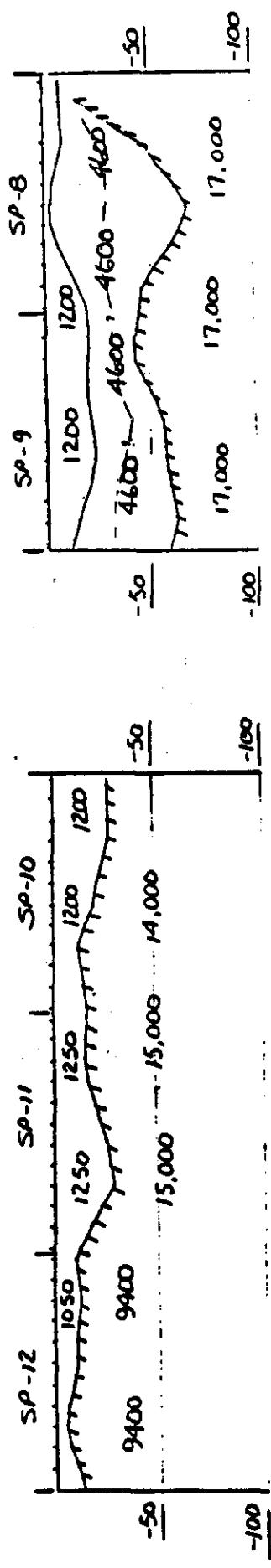
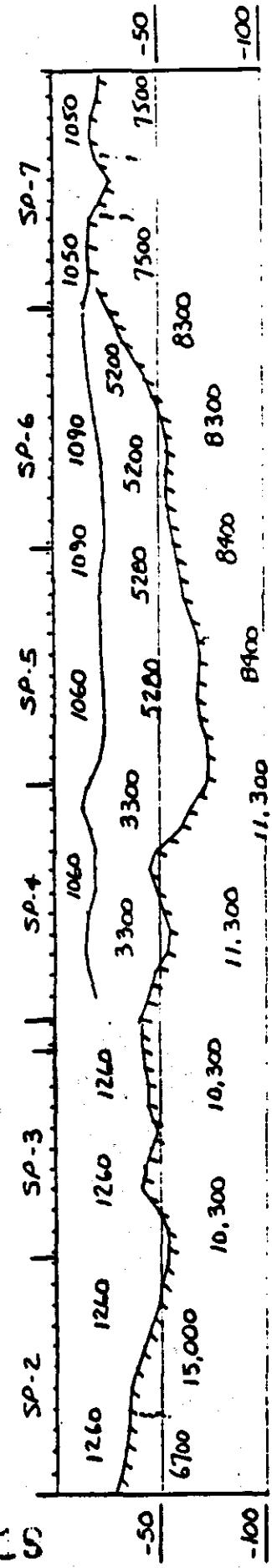
Seismic Survey Inside Landfill Area

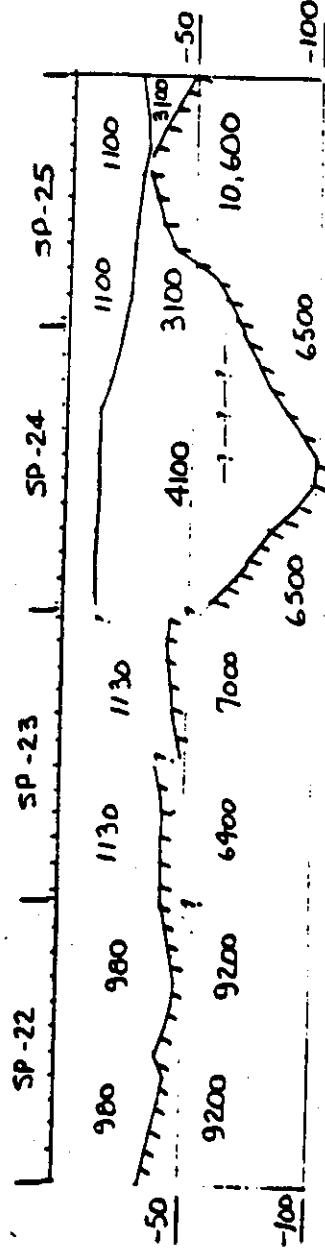
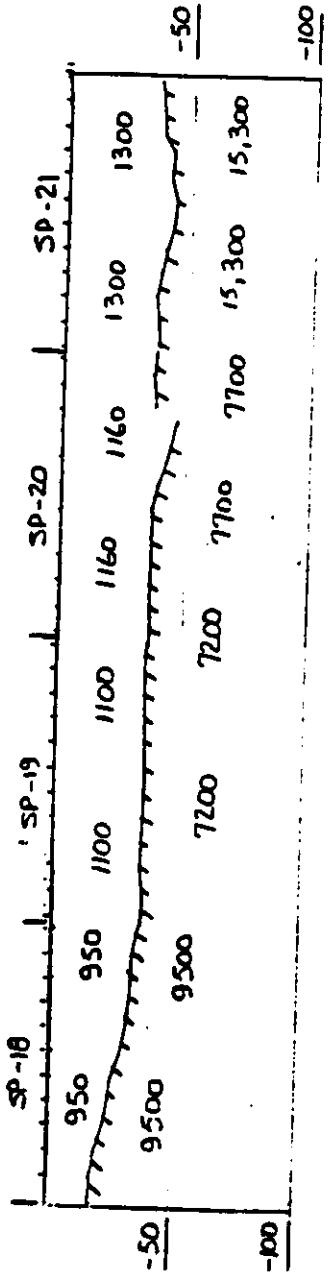
vibra-tech engineers, inc.



Seismic Survey Around Landfill Perimeter
AR000518

VIBRA-TECH ENGINEERS	
SCALE NOTED	APPROVED
DATE 2/8/88	REVISID
DORNEY ROAD LANDFILL	
OUTSIDE LANDFILL AREA	

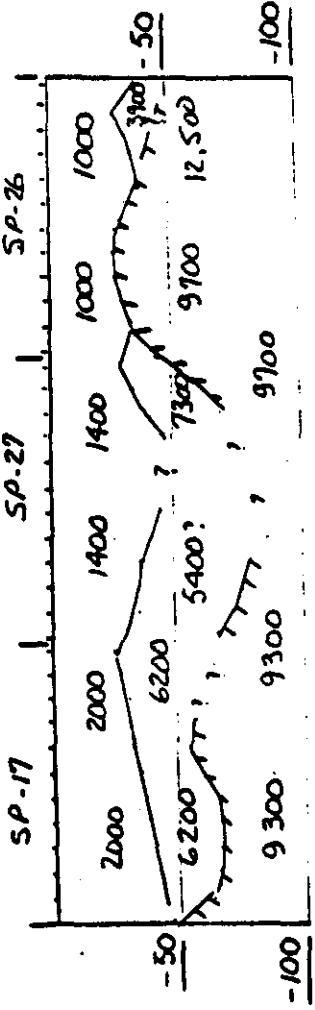
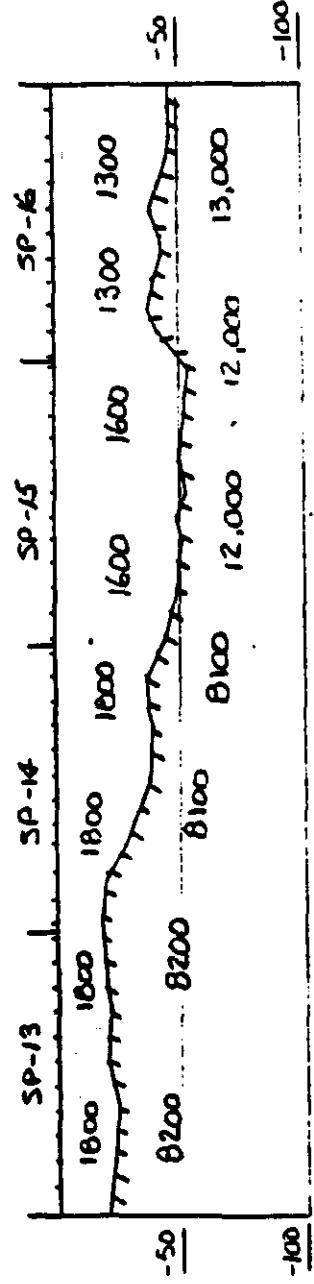




220520

AR000520

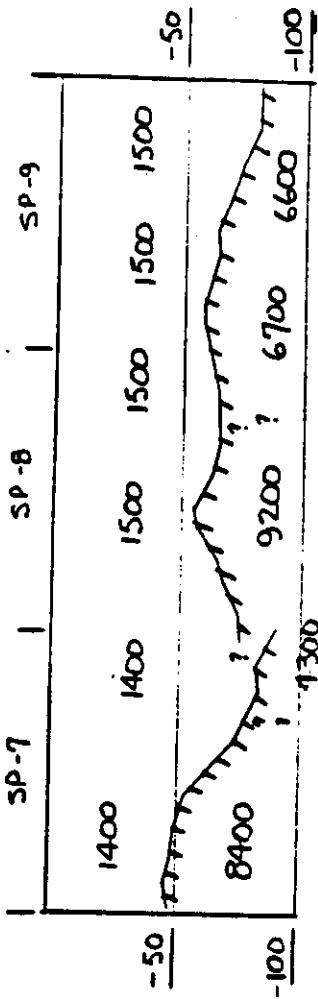
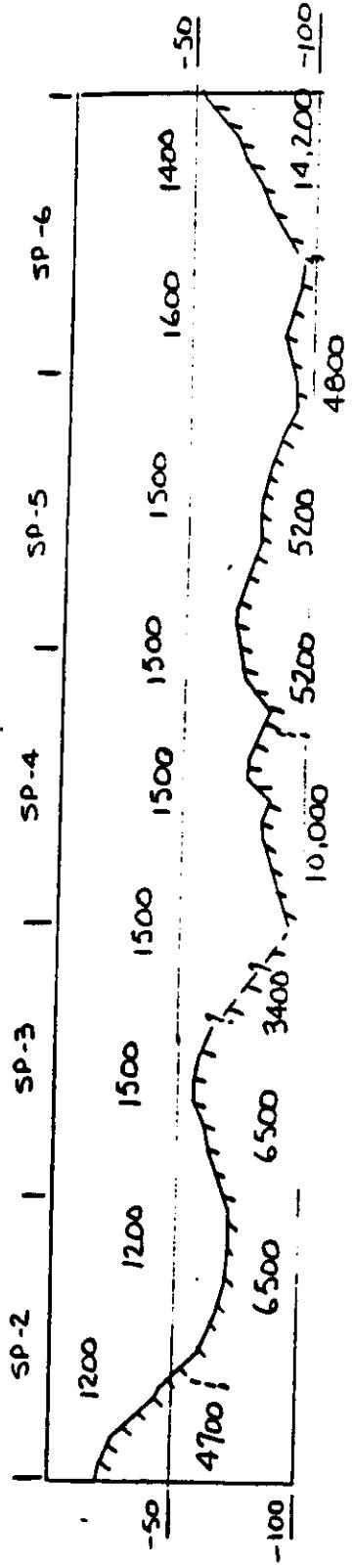
VIBRA-TECH ENGINEERS	
SCALE NOTED	APPROVED BY:
DATE: 2/8/88	DRAWN BY REV'D BY
DORNEY ROAD LANDFILL	
OUTSIDE LANDFILL AREA CONSTRUCTION NUMBER	



VIBRA-TECH ENGINEERS	
SCALE NOTED	APPROVED BY
DATE 2/6/88	REVISION
DORNEY ROAD LANDFILL	
OUTSIDE LANDFILL AREA	

000521

AR000521



000522

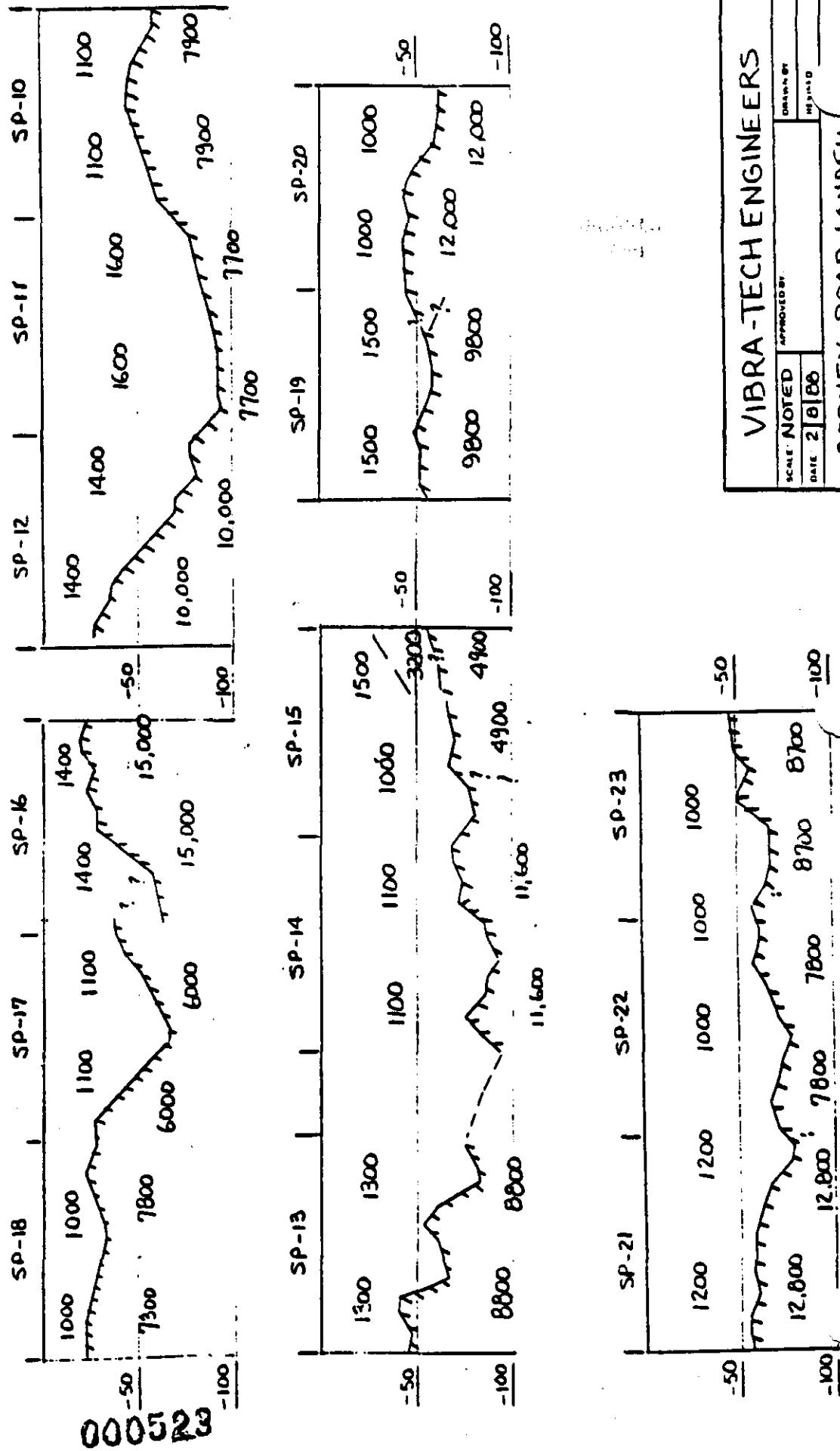
VIBRA-TECH ENGINEERS

SCALE NOTED APPROVED BY
DATE: 2/0/08

DRAWN BY
REVISED
DORNEY ROAD LANDFILL

VIBRA-TECH ENGINEERS
 DORNEY ROAD LANDFILL
 INSIDE LANDFILL AREA

SCALE:	NOTED	APPROVED BY:	DRAWN BY:	CHECKED BY:	REVIEWED BY:



Field Data

Landfill Perimeter

AR000524

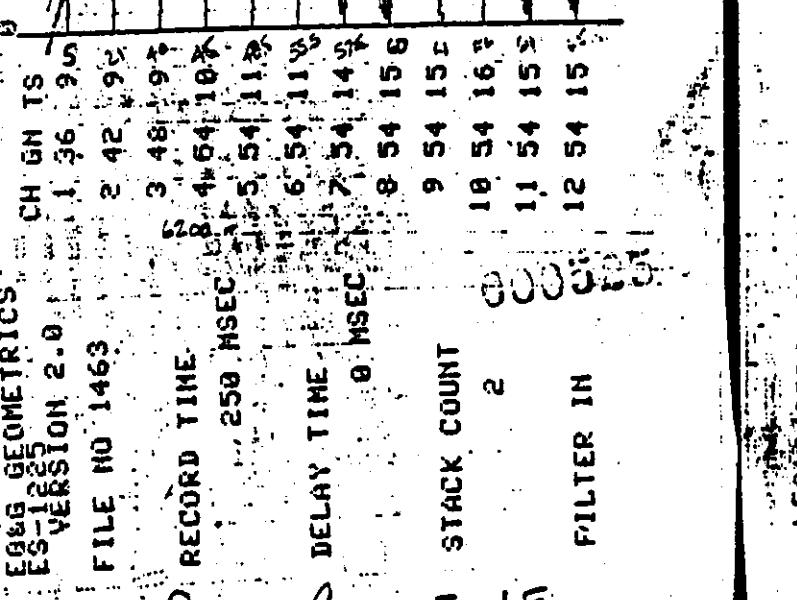
000524

EGG GEOMETRICS

TEST 125
VERSION 2.0
FILE NO 1463

RECORD TIME 250 MSEC
DELAY TIME 0 MSEC
STACK COUNT 2

FILTER IN



TEST

Darney Ray 1F
Stack 2 Outside

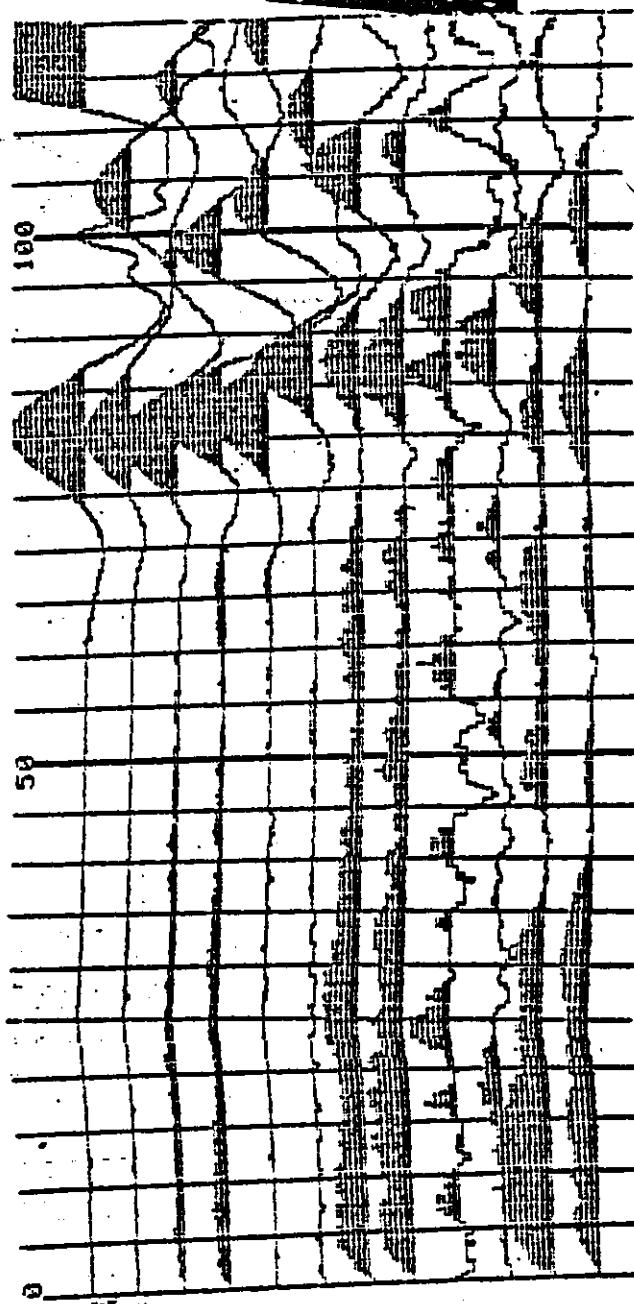
AR000525

EGG GEOMETRICS

TEST 125
VERSION 2.0
FILE NO 1463

RECORD TIME 250 MSEC
DELAY TIME 0 MSEC
STACK COUNT 3

FILTER IN



Darney Ray 1F
Stack 3 Outside

E&G GEOMETRICS
VERSION 2.0

FILE NO 1463

RECORD TIME

250 MSEC

DELAY TIME

0 MSEC

STACK COUNT

3

FILTER IN

12 30 8 5

CH GN TS

1 54 17 2

2 54 15 2

3 54 14 5

4 54 14 5

5 54 14 5

6 54 13 5

7 54 13 5

8 54 12 5

9 54 13 5

10 48 9 5

11 42 7 5

12 30 8 5

13 54 13 5

Damn Sp 1R

Outside

AR000526

E&G GEOMETRICS
ES-1225
VERSION 2.0

FILE NO 1463

RECORD TIME

250 MSEC

DELAY TIME

0 MSEC

STACK COUNT

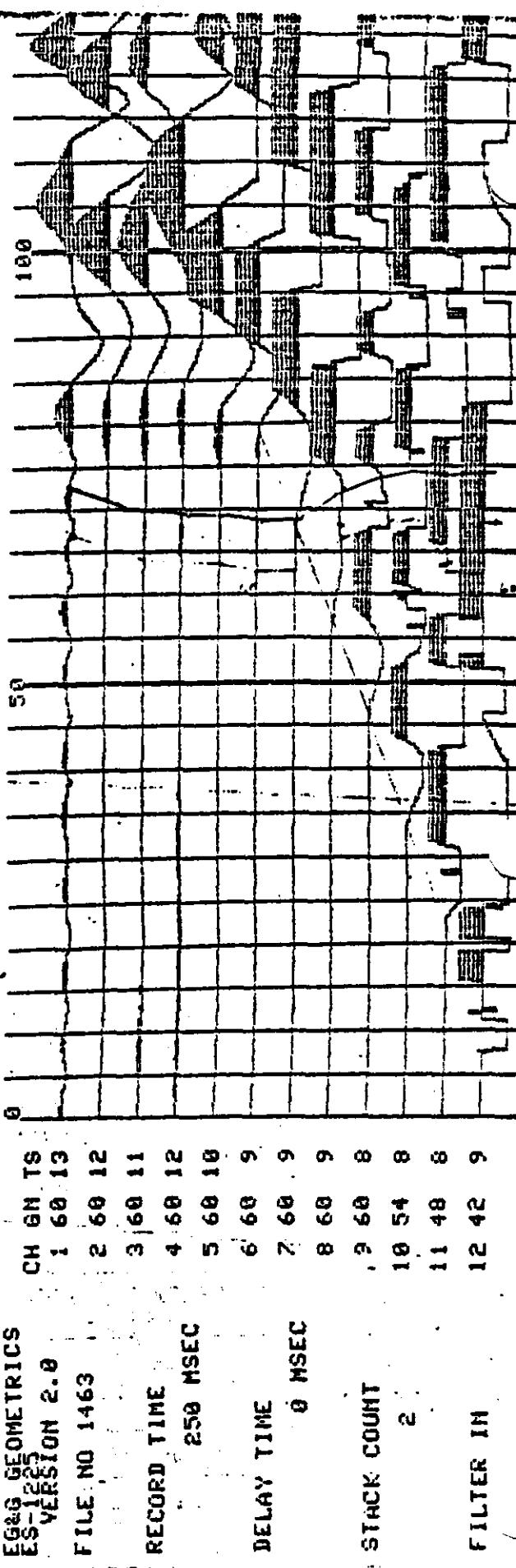
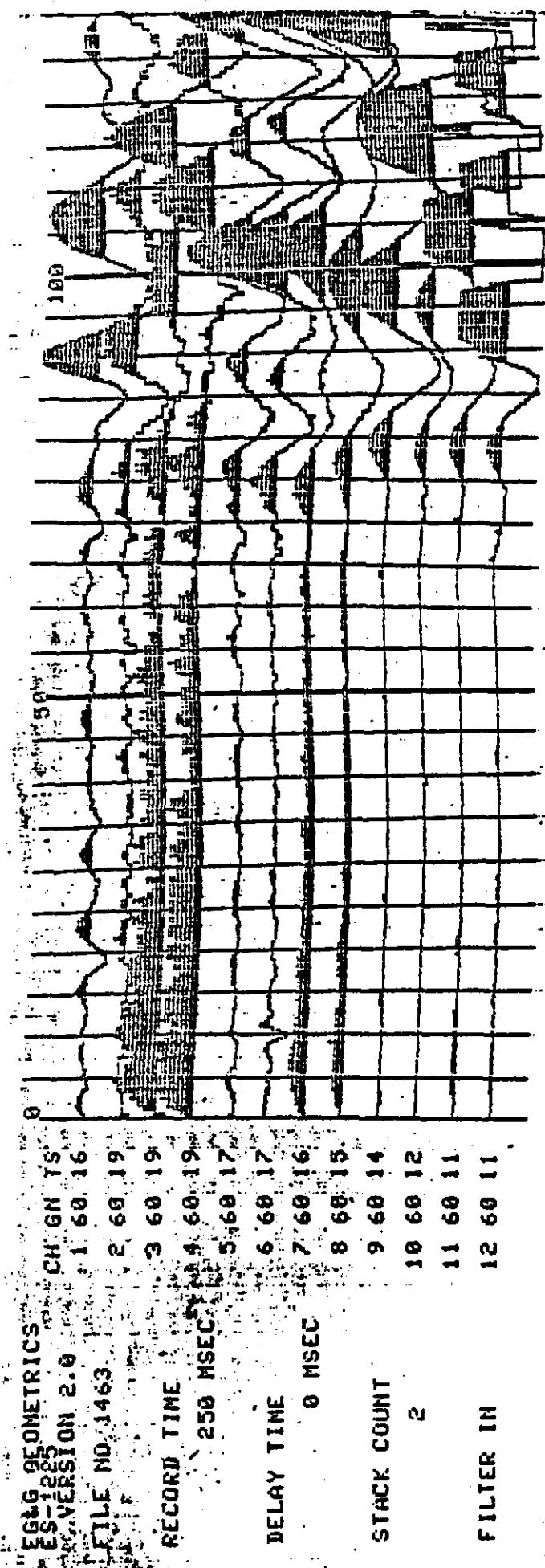
3

FILTER IN

12 54 13

Opt Offset 100' TEST
Firering Level Outside

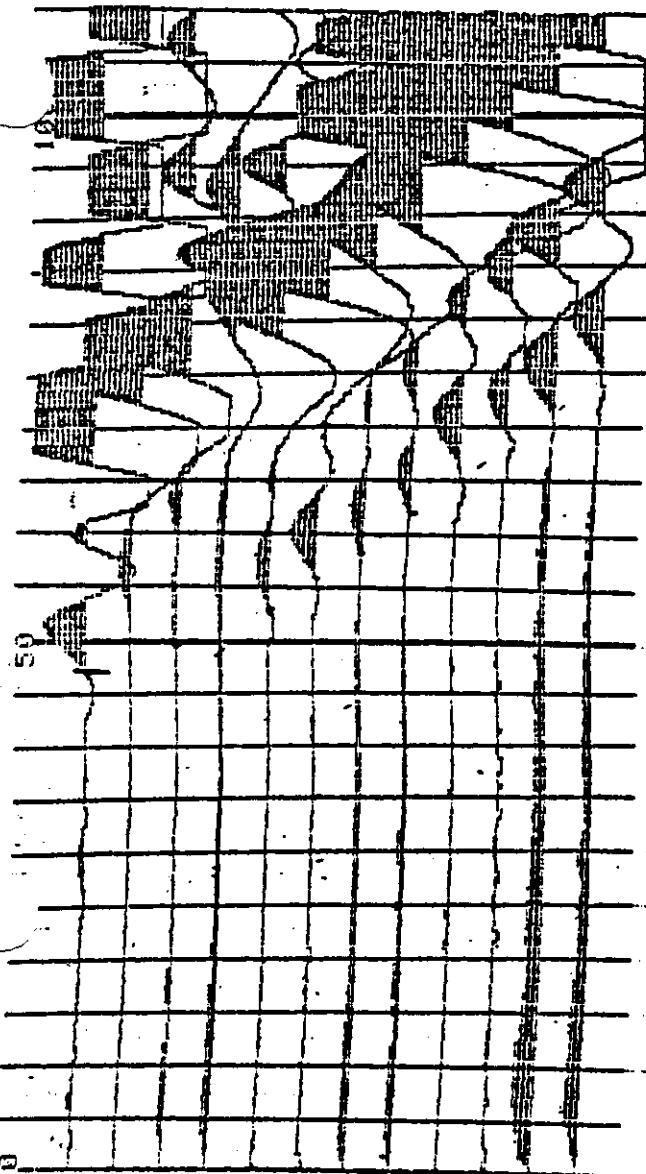
000528



2 20.0 AR000527c
 AR000527

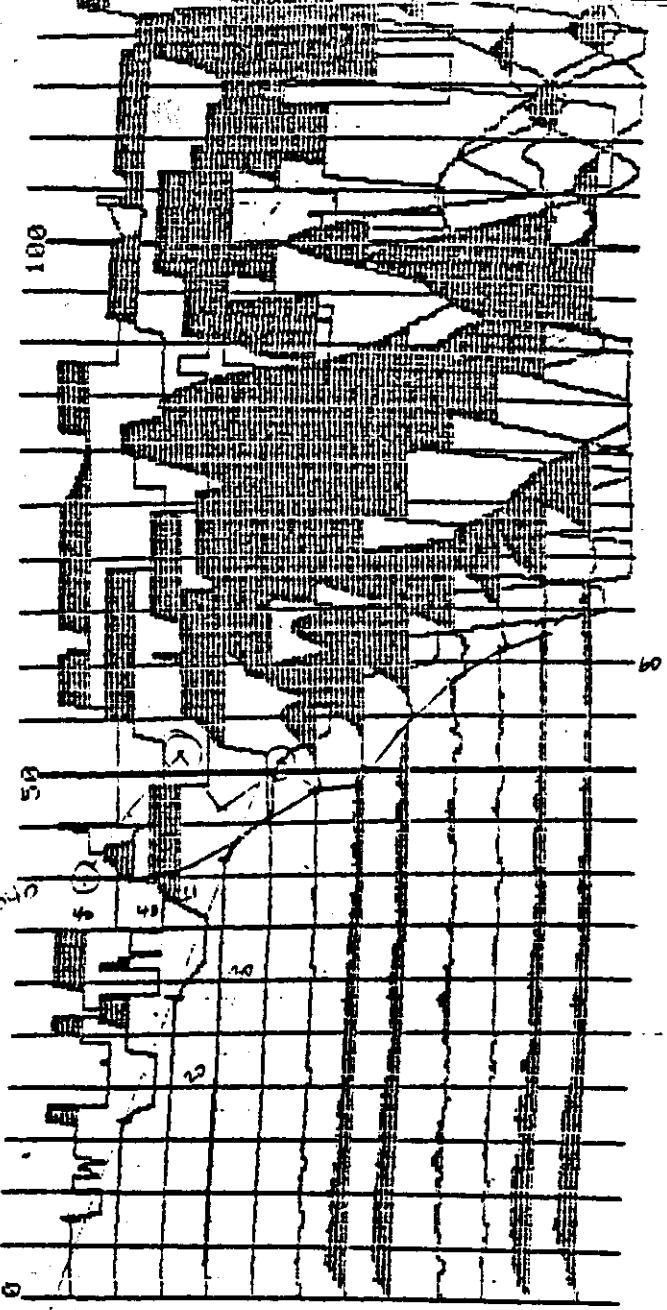
EGG GEOMETRICS
 VERSION 2.0
 FILE NO 1463
 RECORD TIME 250 MSEC
 DELAY TIME 0 MSEC
 STACK COUNT 3
 FILTER IN SP2L

Sp 2 During 39° S
 Offset 115' Outside



EGG GEOMETRICS
 VERSION 2.0
 FILE NO 1463
 RECORD TIME 250 MSEC
 DELAY TIME 0 MSEC
 STACK COUNT 3
 FILTER IN SP2F

During Rod Sp 2 39° S
 3 Stacks



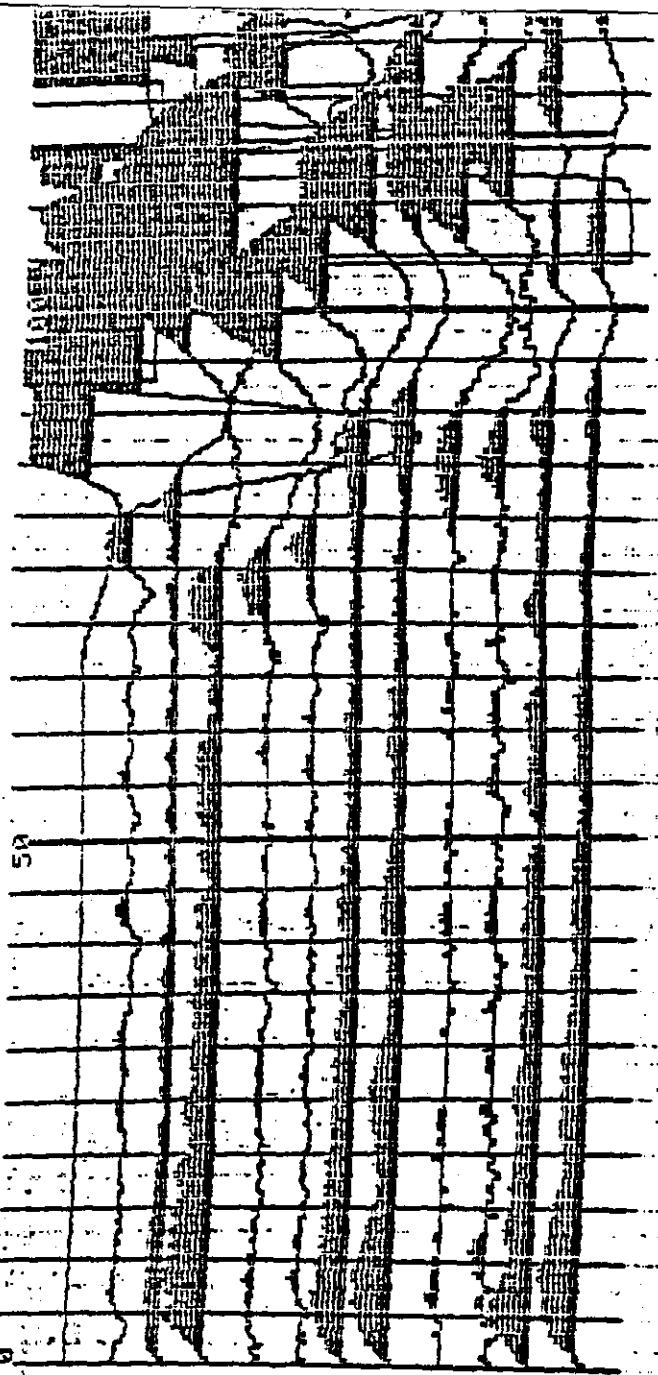
AR000528

000528

EIGE'S GEOMETRICS
EST-125
VERSION 2.0
FILE NO 1469.

RECORD TIME 3 60 14
4 60 17
5 60 17
6 60 17
7 60 16
8 60 16
9 60 18
10 60 18
11 60 16
12 60 16

FILTER IN



EIGE'S GEOMETRICS
EST-125
VERSION 2.0

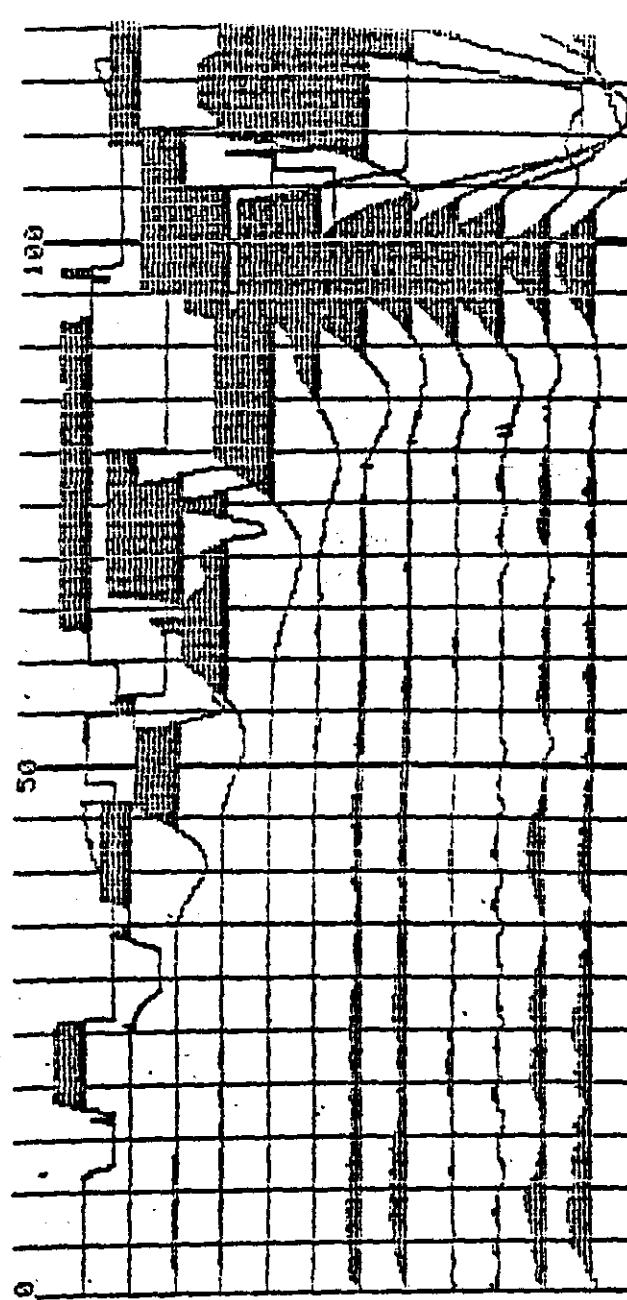
FILE NO 1463

RECORD TIME 3 48 10
4 54 10
5 60 11

DELAY TIME 6 60 12
7 60 14
8 60 14

STACK COUNT 3 60 14
10 60 15
11 60 14
12 60 15

FILTER IN



During Rd

Tu 03

220'

Outside

000529

AR000529

GEOMETRICS

VERSION 2.0
FILE NO 1463

CH GN TS
1 60 15
2 60 14
3 60 15

RECORD TIME 250 MSEC
0 MSEC

DELAY TIME 6 60 14
7 60 9

STACK COUNT 8 60 9
9 54 8

10 48 8
11 42 9

12 36 8

FILTER IN 3
4
5
6
7

Dunry Rd SP-3R

Outside

AR000530

100

50

0

6

4

2

0

EG&G GEOMETRICS

VERSION 2.0
FILE NO 1463

CH GN TS
1 60 16
2 60 15

RECORD TIME 3 60 17
4 60 16

250 MSEC
0 MSEC

DELAY TIME 6 60 18
7 60 14

STACK COUNT 8 60 14
9 60 12

10 60 12
11 60 11

12 60 10

Dunry Rd SP-3R

Outside

003530

100

50

0

6

4

2

0

E&G GEOMETRICS
VERSION 2.0

FILE NO 1463

RECORD TIME

258 MSEC

DELAY TIME

0 MSEC

STACK COUNT

9 60 15

1

10 60 12

11 60 11

FILTER IN

8 60 14

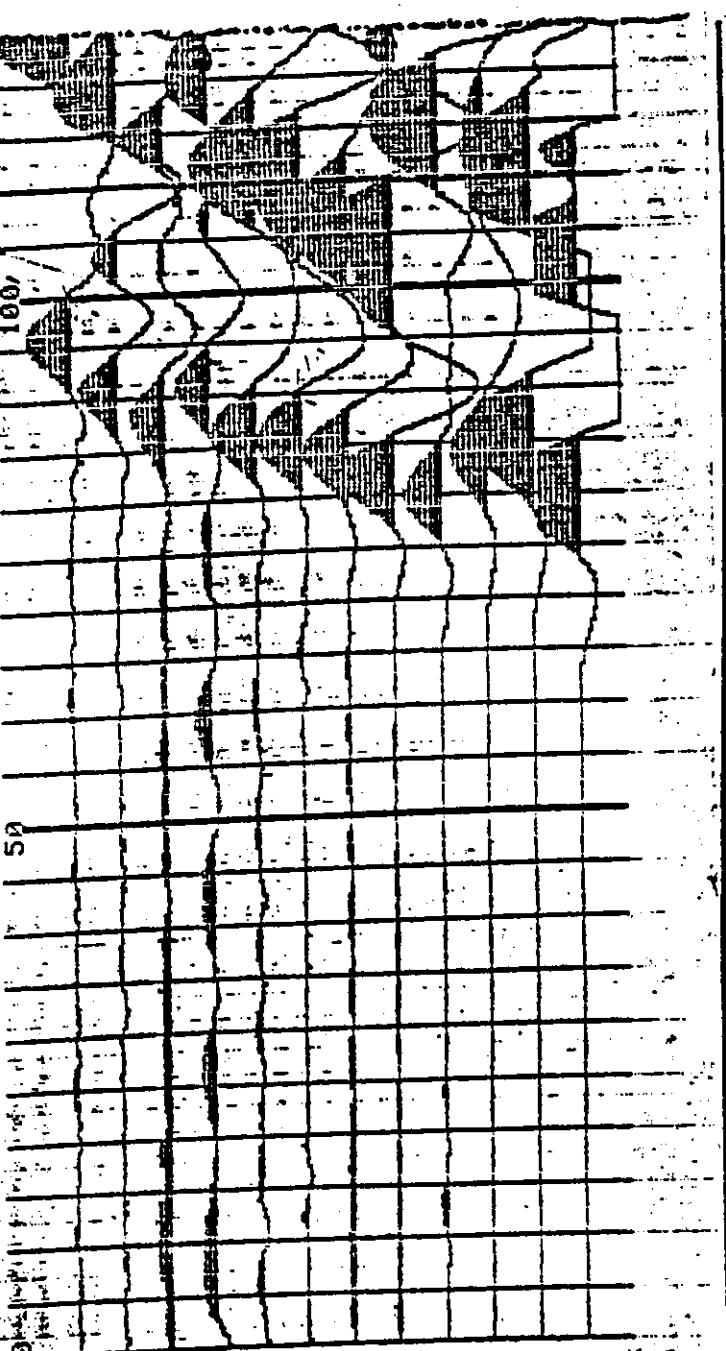
9 60 13

10 60 11

11 60 10

12 60 10

Damn Rd SP4LR Outside



E&G GEOMETRICS

VERSION 2.0

FILE NO 1463

RECORD TIME

258 MSEC

DELAY TIME

0 MSEC

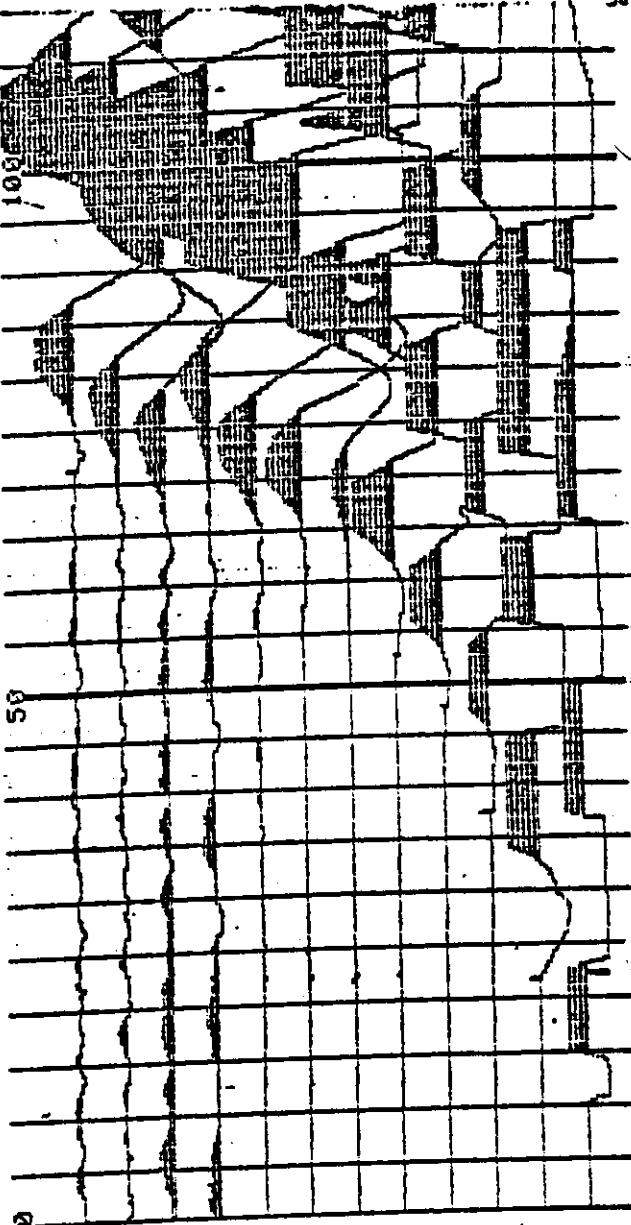
STACK COUNT

9 54 9

10 48 9

11 42 9

12 36 8



Damn Rd SP4 R.
Outside

C00531

AR000531

EGG GEOMETRICS
 VERSION 2.0
 FILE NO 1463
 250 MSEC
 RECORD TIME
 3 60 14
 4 60 17
 5 60 12
 6 60 17
 7 60 16
 8 60 15
 9 60 16
 10 60 16
 11 60 15
 12 60 15
 DELAY TIME
 0 MSEC
 STACK COUNT
 1
 FILTER IN

Dawn
OK Rd

PC-H

Outsite

EGG GEOMETRICS
 EST 1225
 VERSION 2.0
 FILE NO 1463
 250 MSEC
 RECORD TIME
 1 36 9
 2 42 9
 3 48 10
 4 54 10
 5 60 11
 6 60 12
 7 60 14
 8 60 14
 9 60 14
 10 60 15
 11 60 14
 12 60 15
 DELAY TIME
 0 MSEC
 STACK COUNT
 FILTER IN

AR000532

Tommy Ki

6

7

Outsite

000532

EG&G GEOMETRICS

ES-1225 VERSION 2.0

FILE NO 1463

CH GN TS

1 60 11

2 60 13

RECORD TIME

3 60 13

4 60 13

250 MSEC

5 60 15

6 60 16

DELAY TIME

7 60 16

8 60 16

9 60 18

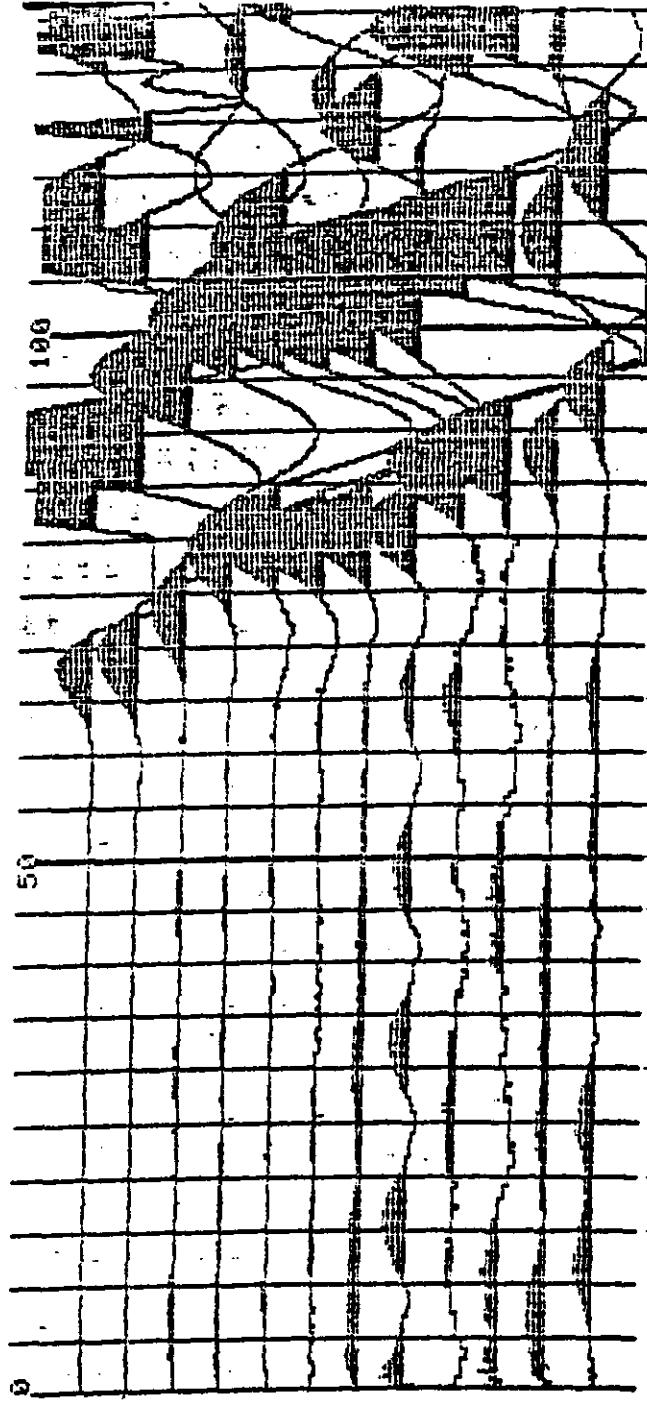
10 60 18

11 60 16

12 60 16

FILTER IN

Outside



EG&G GEOMETRICS

ES-1225 VERSION 2.0

FILE NO 1463

CH GN TS

1 36 9

2 42 9

3 48 10

4 54 10

250 MSEC

5 60 11

6 60 12

7 60 14

8 60 14

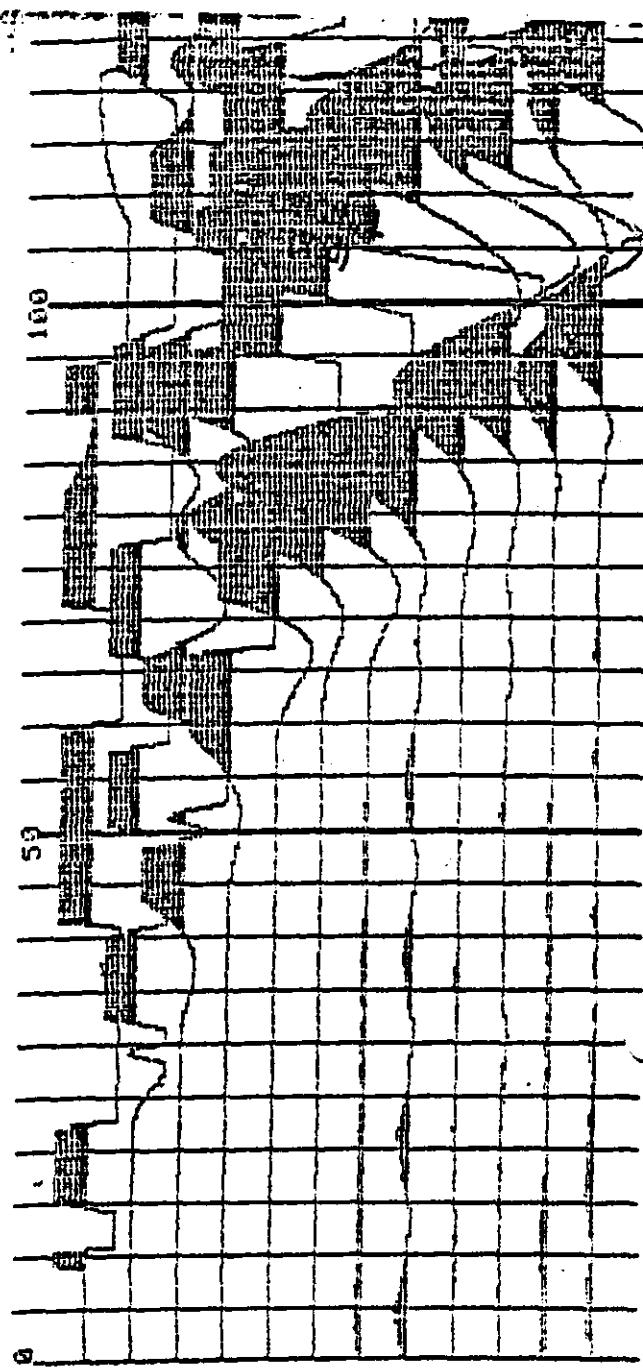
9 60 14

10 60 15

11 60 14

12 60 15

FILTER IN



000533

AR000533 (11/15/77)

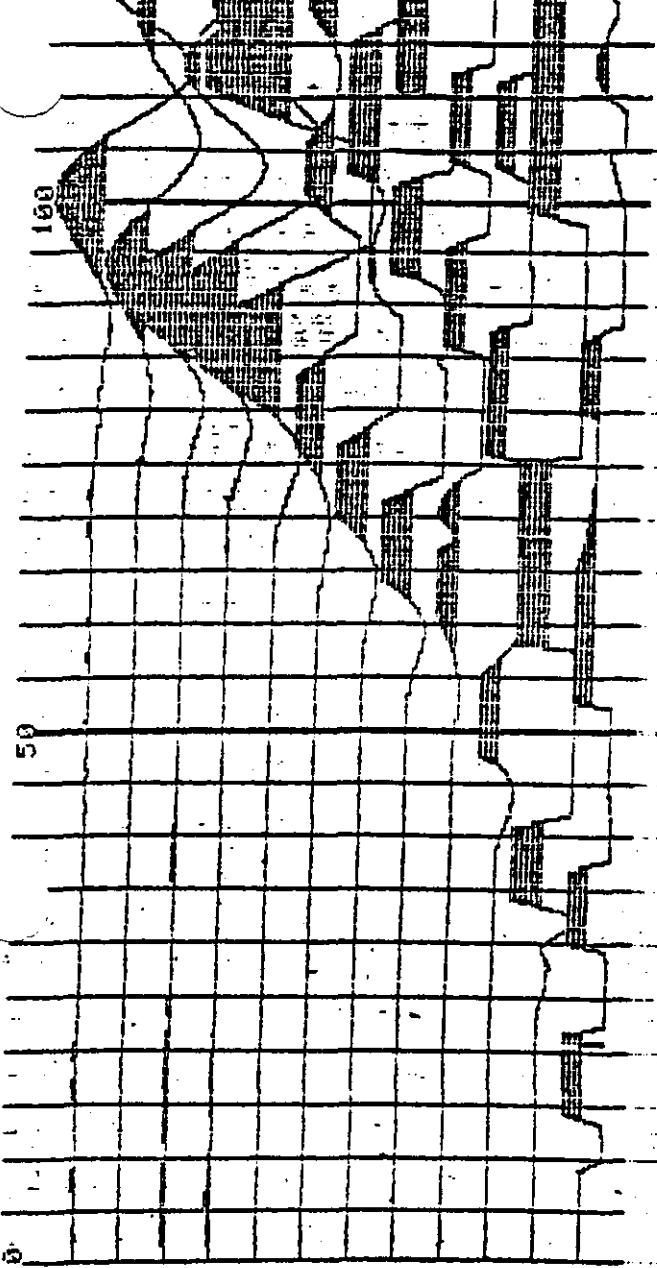
AR000533

EEG
EST-125
VERSION 2.0
FILE NO 1463

RECORD TIME 250 MSEC
DELAY TIME 0 MSEC

STACK COUNT 1
FILTER IN

SPS Soring R L
ARO.00534
Outside



EEG GEOMETRICS
EST-125

VERSION 2.0
FILE NO 1463

RECORD TIME 250 MSEC
DELAY TIME 0 MSEC

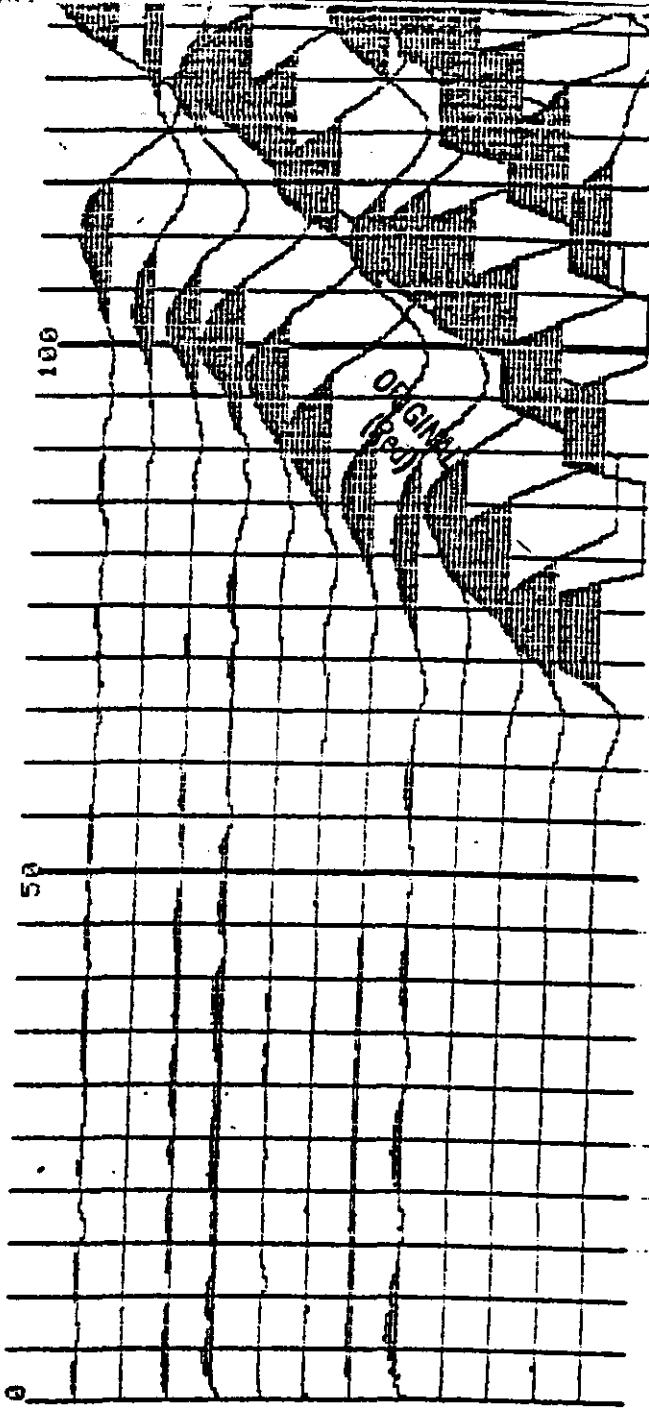
STACK COUNT 1
FILTER IN

EEG GEOMETRICS
EST-125
VERSION 2.0
FILE NO 1463

RECORD TIME 250 MSEC
DELAY TIME 0 MSEC

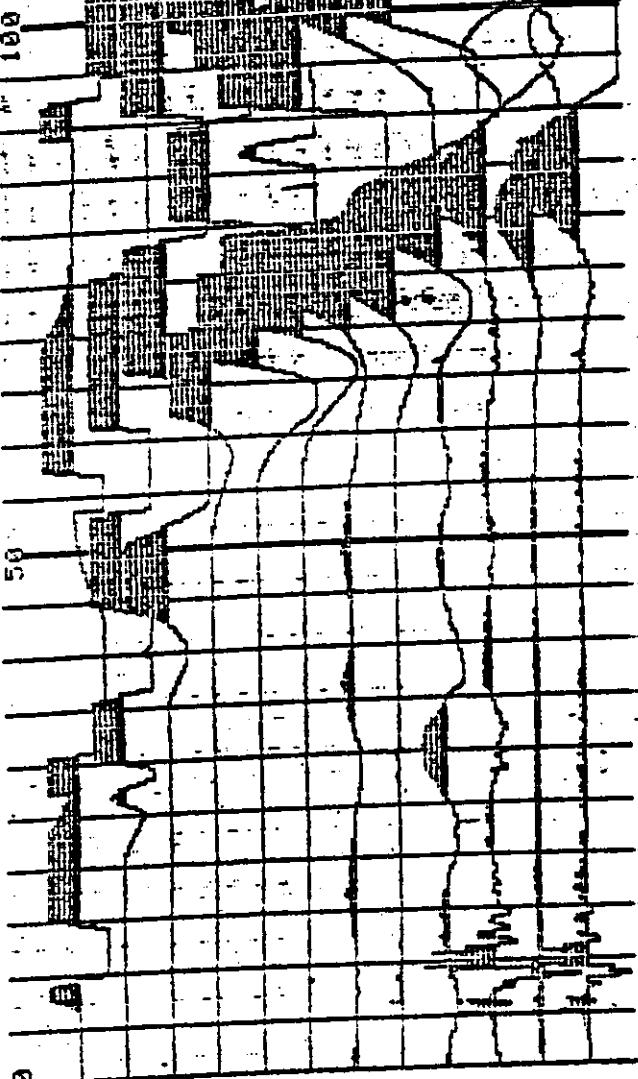
STACK COUNT 1
FILTER IN

Outside



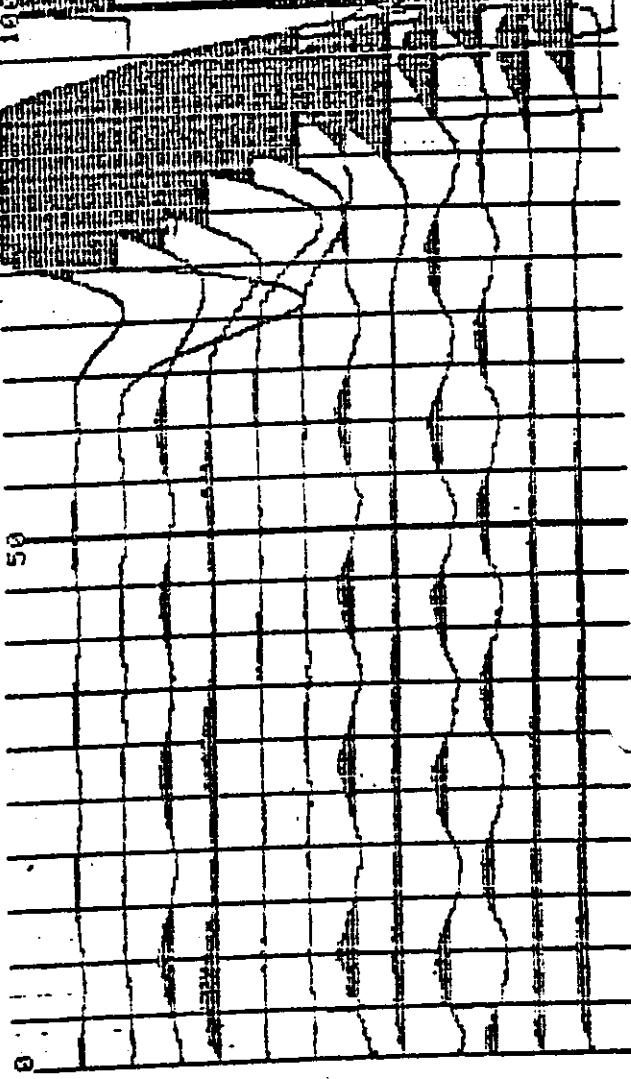
EG&G GEOMETRICS
 ES-125
 VERSION 2.0
 FILE NO 1463
 RECORD TIME
 250 MSEC
 DELAY TIME
 0 MSEC
 STACK COUNT
 1
 FILTER IN

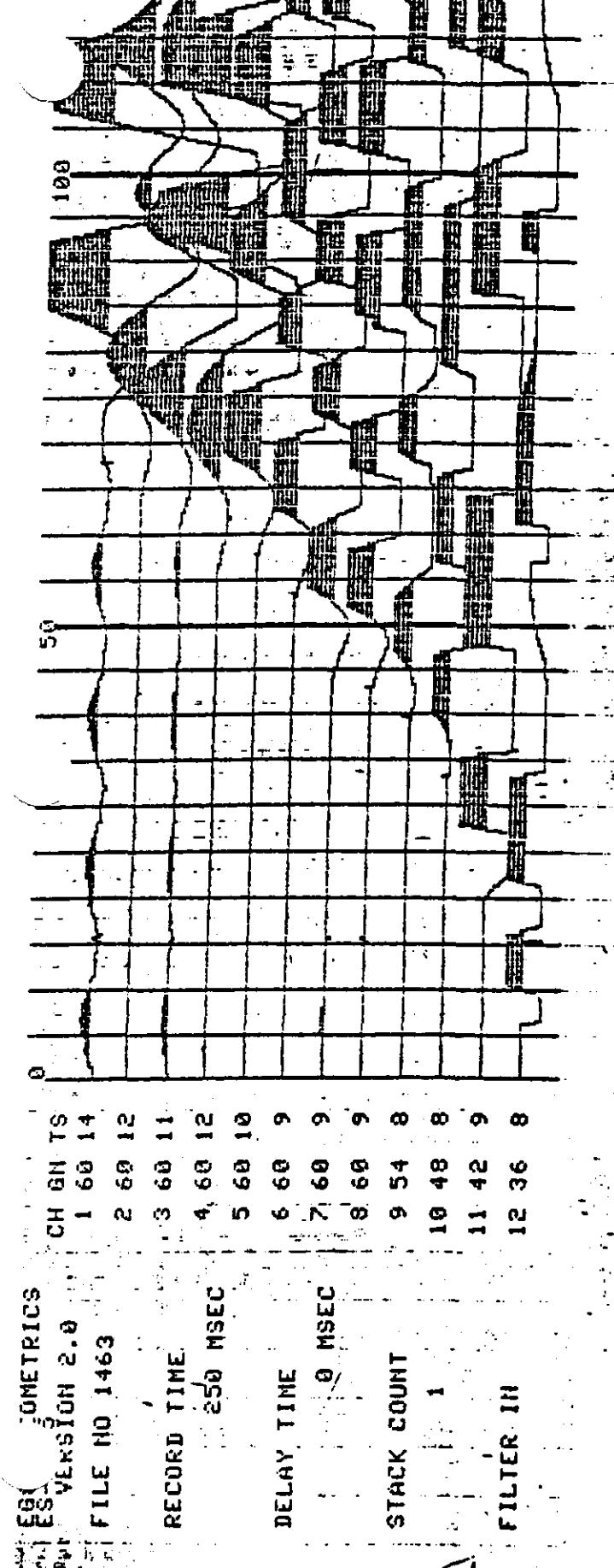
During Read Scan Outside
 000535



EG&G GEOMETRICS
 ES-125
 VERSION 2.0
 FILE NO 1463
 RECORD TIME
 250 MSEC
 DELAY TIME
 0 MSEC
 STACK COUNT
 1
 FILTER IN

During Read Scan Inside
 AR000535

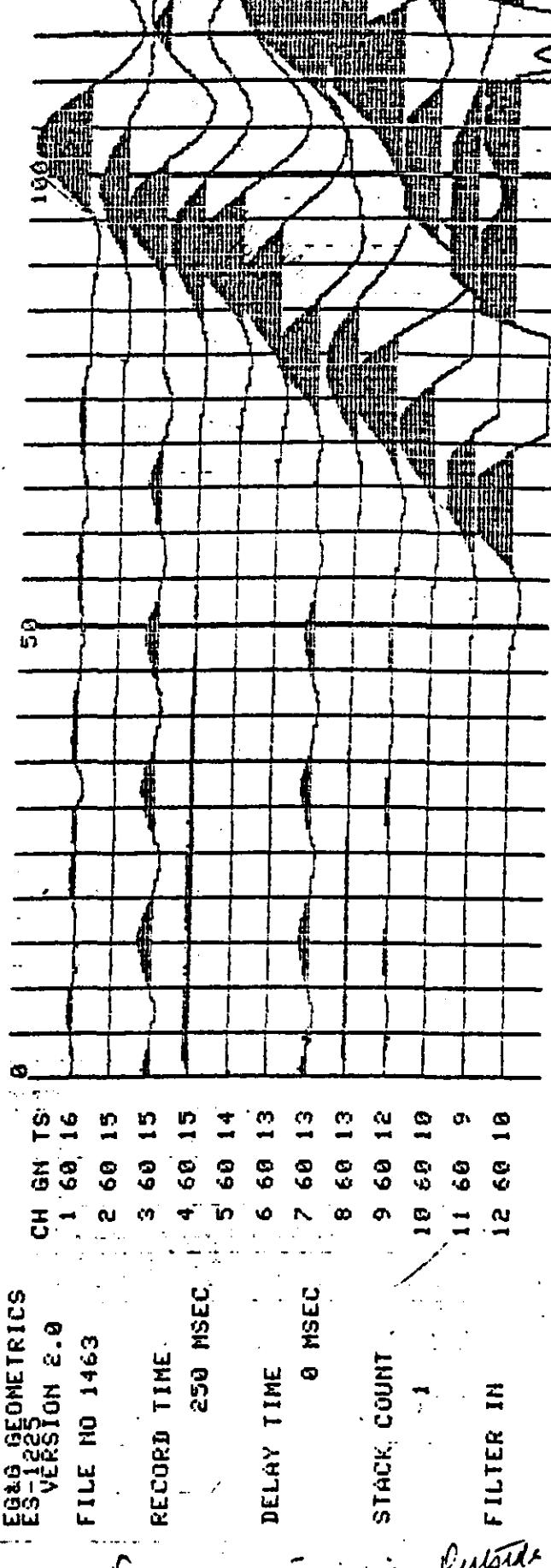




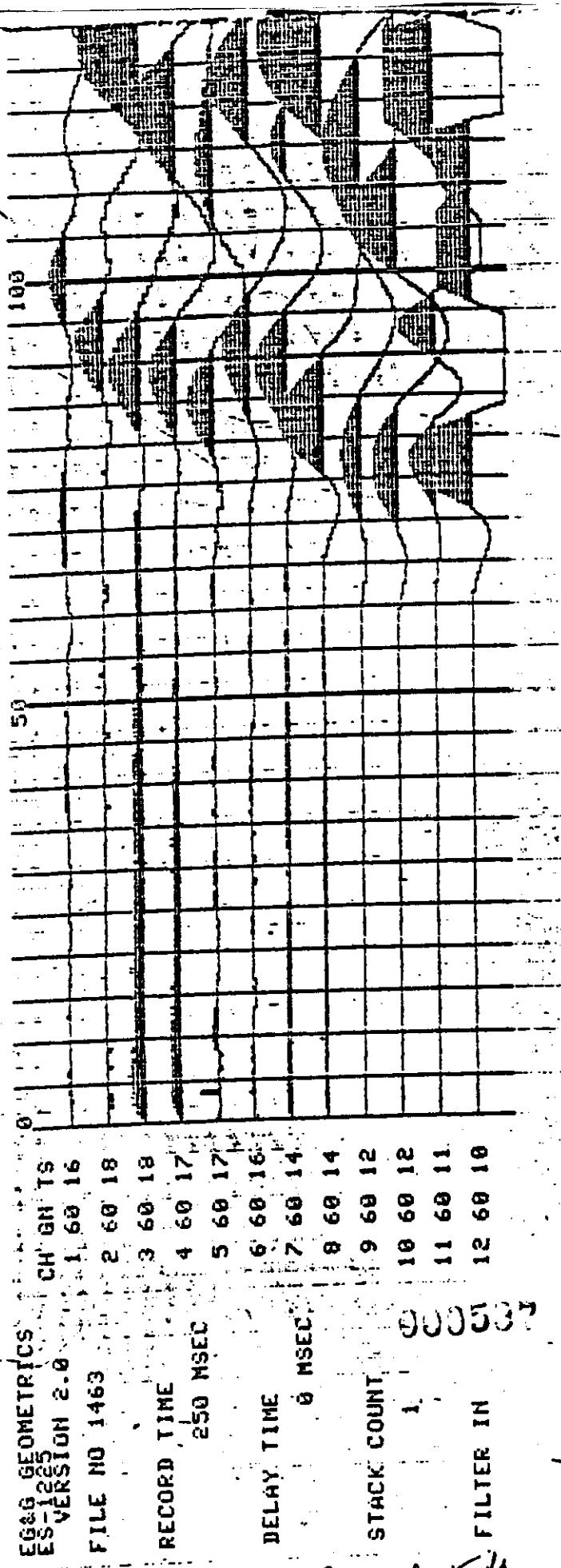
Gang Rd So 5R

Outside

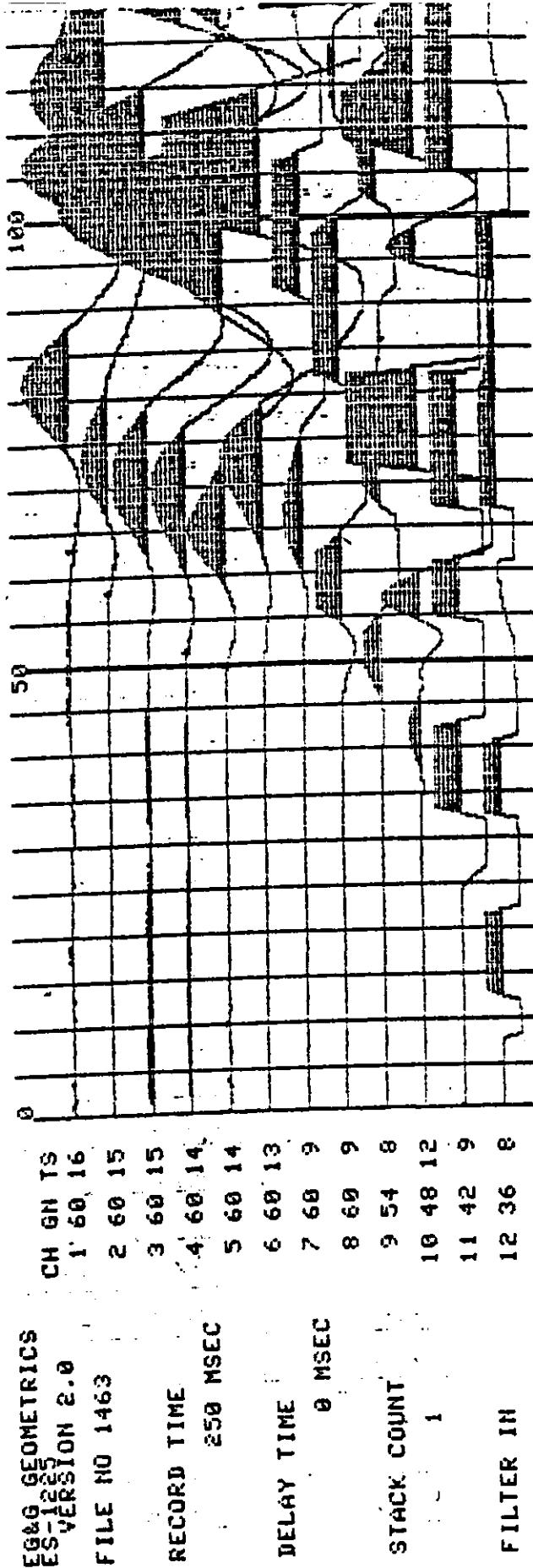
000536



AR000536



Darry Rd 307 LR Outside

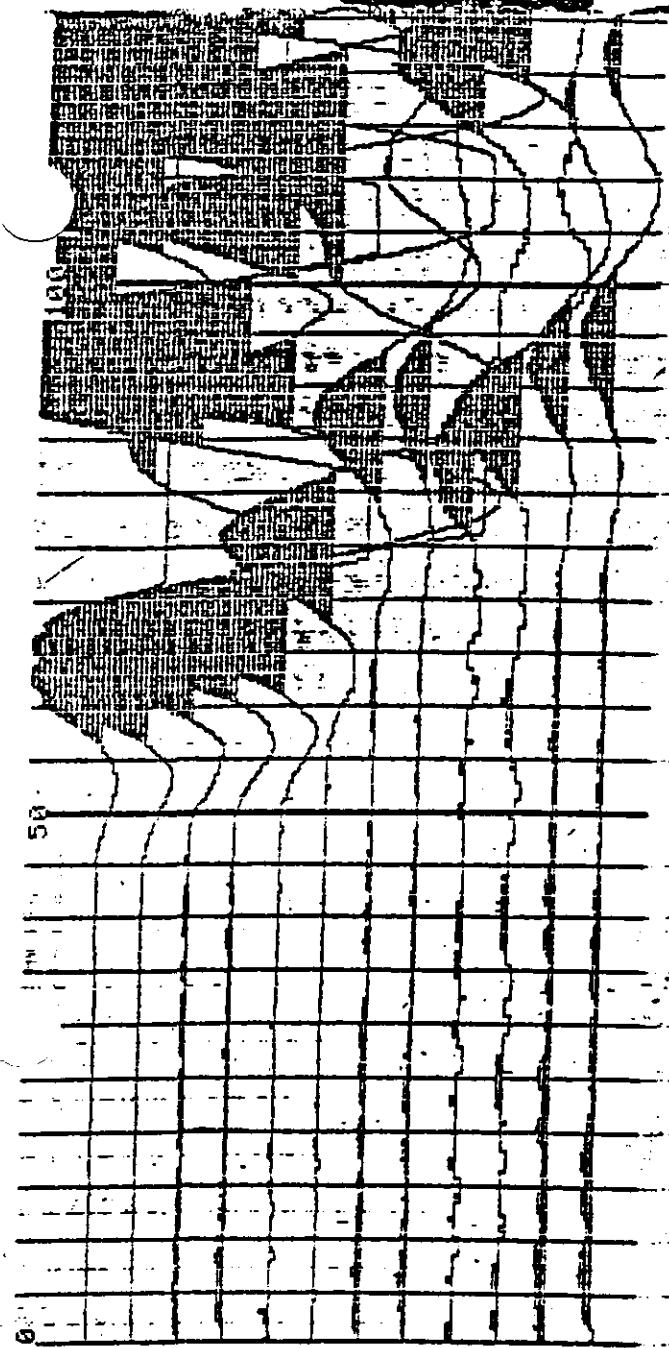


Darry Rd 307 R Outside

AR000537

GEOMETRICS
 VERSION 2.0
 FILE NO 1463
 RECORD TIME 250 msec
 DELAY TIME 0 msec
 STACK COUNT 1
 FILTER IN

Derry Road 127-LF
 Outside



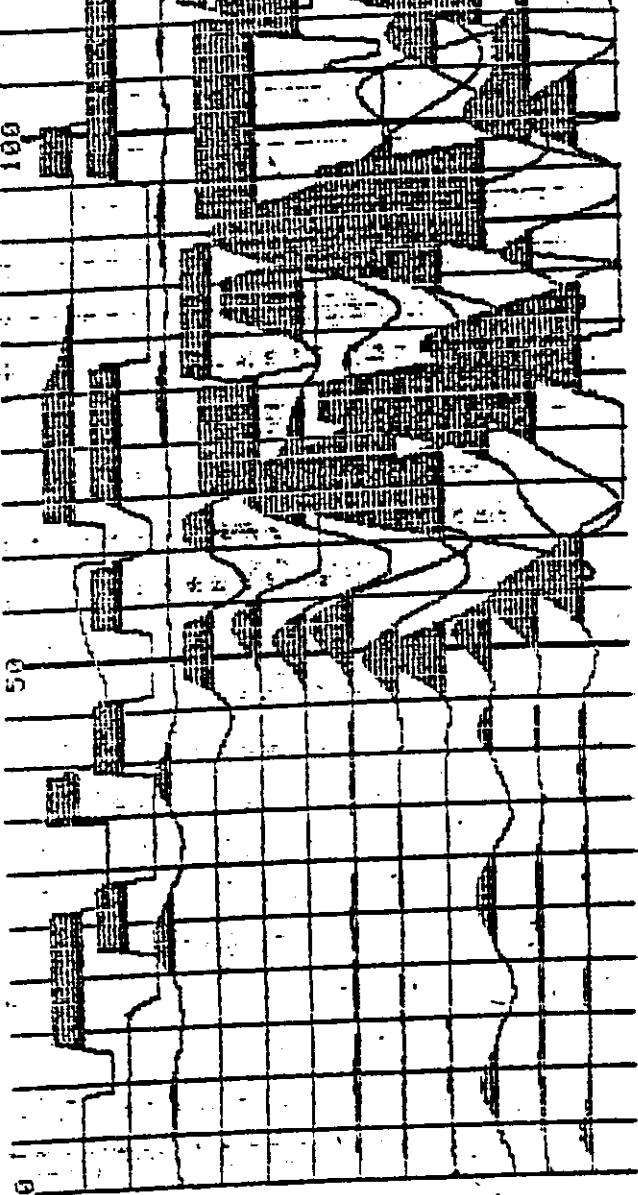
EGG GEOMETRICS
 VERSION 2.0

FILE NO 1463
 RECORD TIME 250 msec
 DELAY TIME 0 msec
 STACK COUNT 1
 FILTER IN

Derry Road 127-LF
 Outside

000538

AR000538

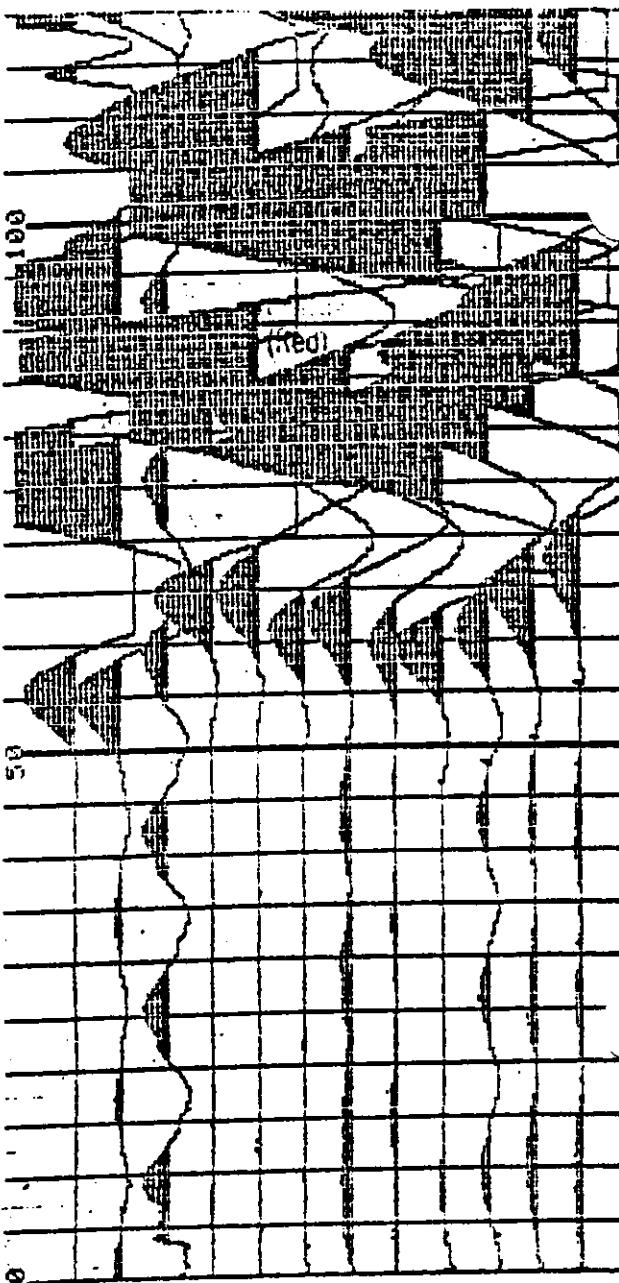


EGG GEOMETRICS
 EST 225 VERSION 2.0
 FILE NO 1463
 RECORD TIME 12:05
 250 MSEC
 DELAY TIME 0 msec
 STACK COUNT 1
 FILTER IN

SP-10F

12:05

12/23/87 - 000539



EGG GEOMETRICS
 EST 225 VERSION 2.0
 FILE NO 1463
 RECORD TIME 12:00 PM
 250 MSEC
 DELAY TIME 0 msec
 STACK COUNT 1
 FILTER IN

SP-10 LF

12:00 PM

12/23/87

AR000539

EGG GEOMETRICS
EST-1255
VERSION 2.0
FILE NO 1463

RECORD TIME 0 MSEC

DELAY TIME 0 MSEC

STACK COUNT 1

FILTER IN 12 36 8

SP

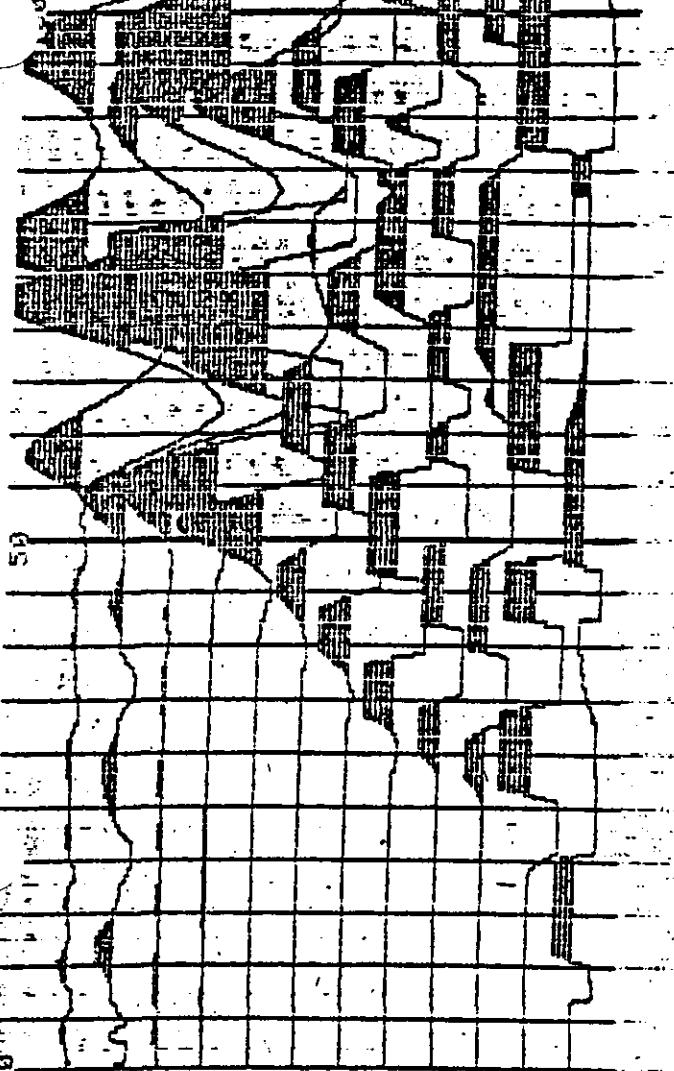
10

R

SP-10 R

12:10 PM
12/23/87

Outside



EGG GEOMETRICS
EST-1255
VERSION 2.0
FILE NO 1463

RECORD TIME 0 MSEC

DELAY TIME 0 MSEC

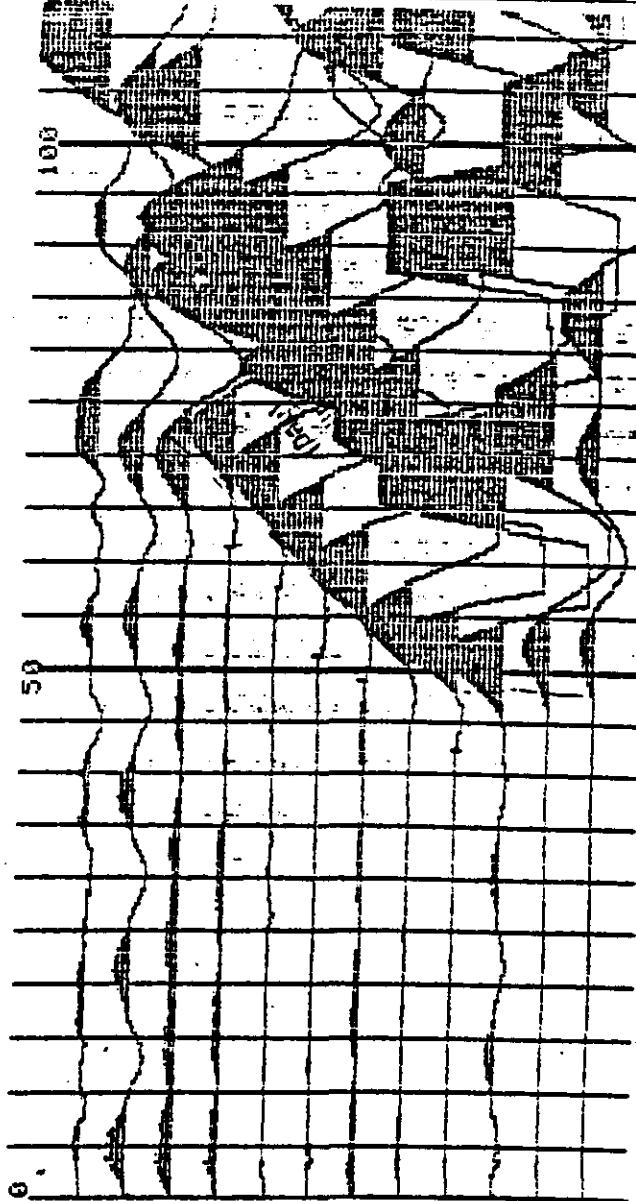
STACK COUNT 1

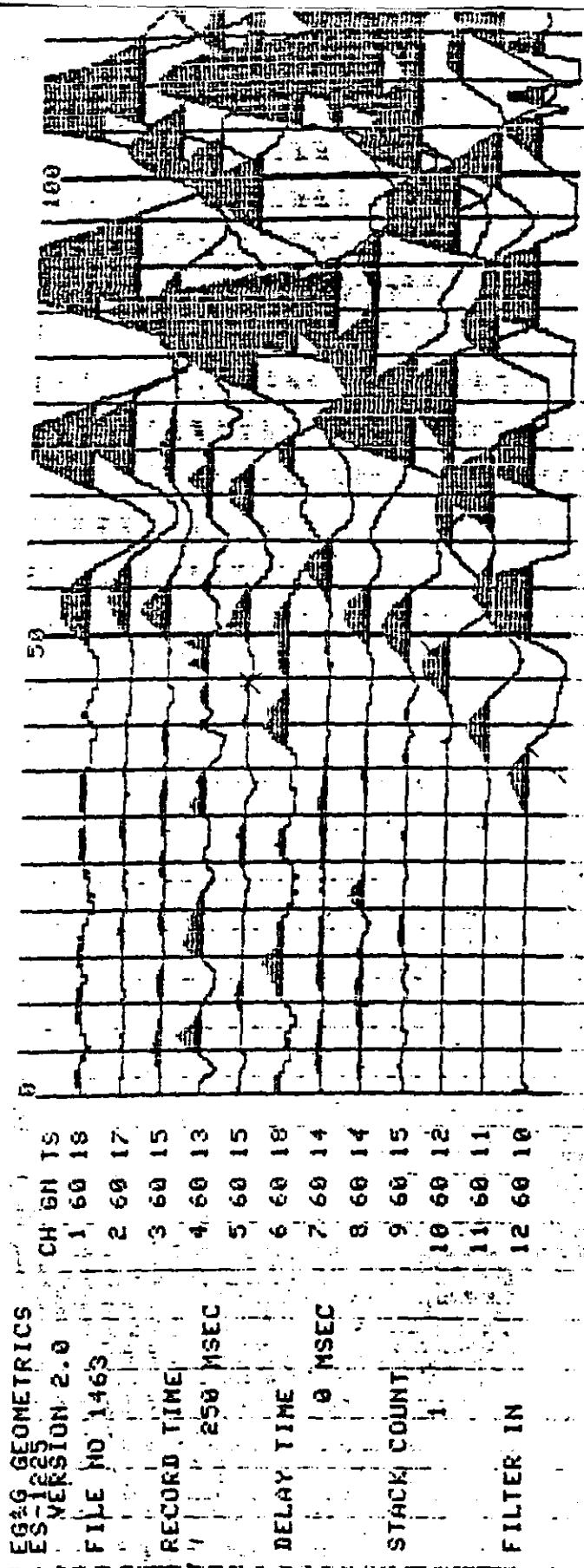
FILTER IN 12 60 10

SP-10 LR

12:10 PM
12/23/87

AR000540

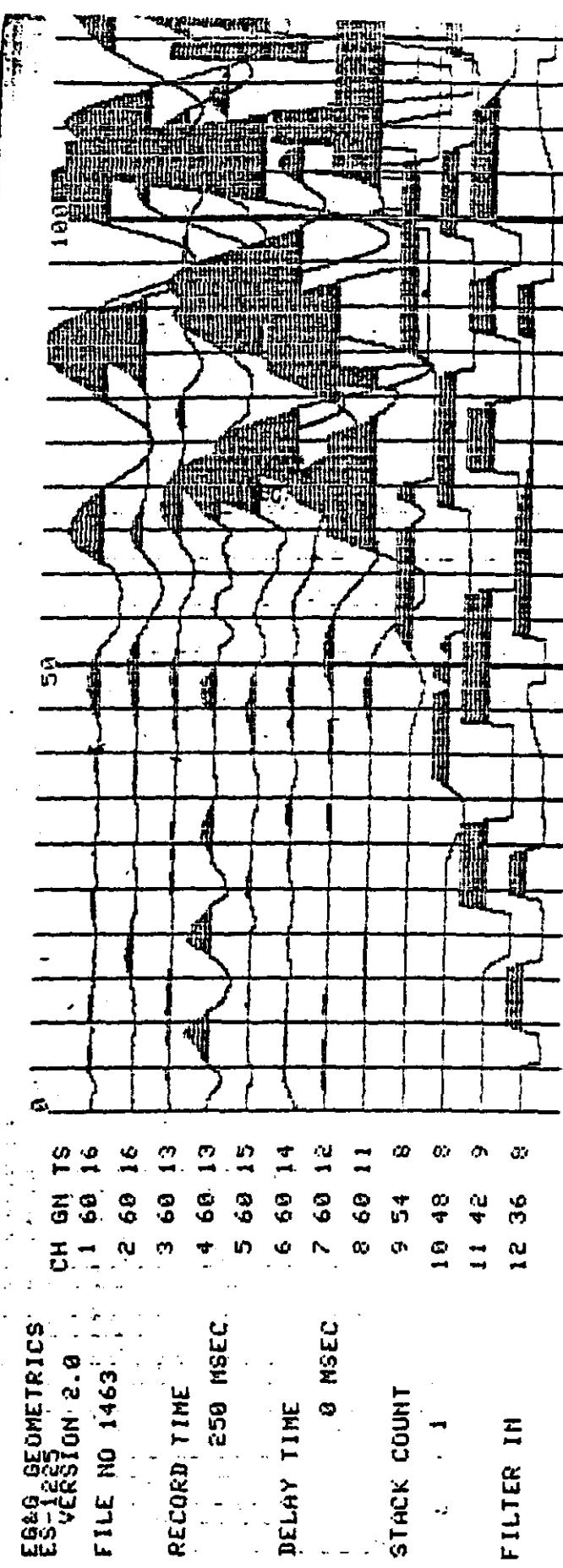




SP-11LR
2:13PM
12/23/67

Outside

000541



SP-11R
2:10PM
12/23/67

Outside

AR000541

EG&G GEOMETRICS
ES-1225

FILE NO. 1463

RECORD TIME
250 MSEC

DELAY TIME
0 MSEC

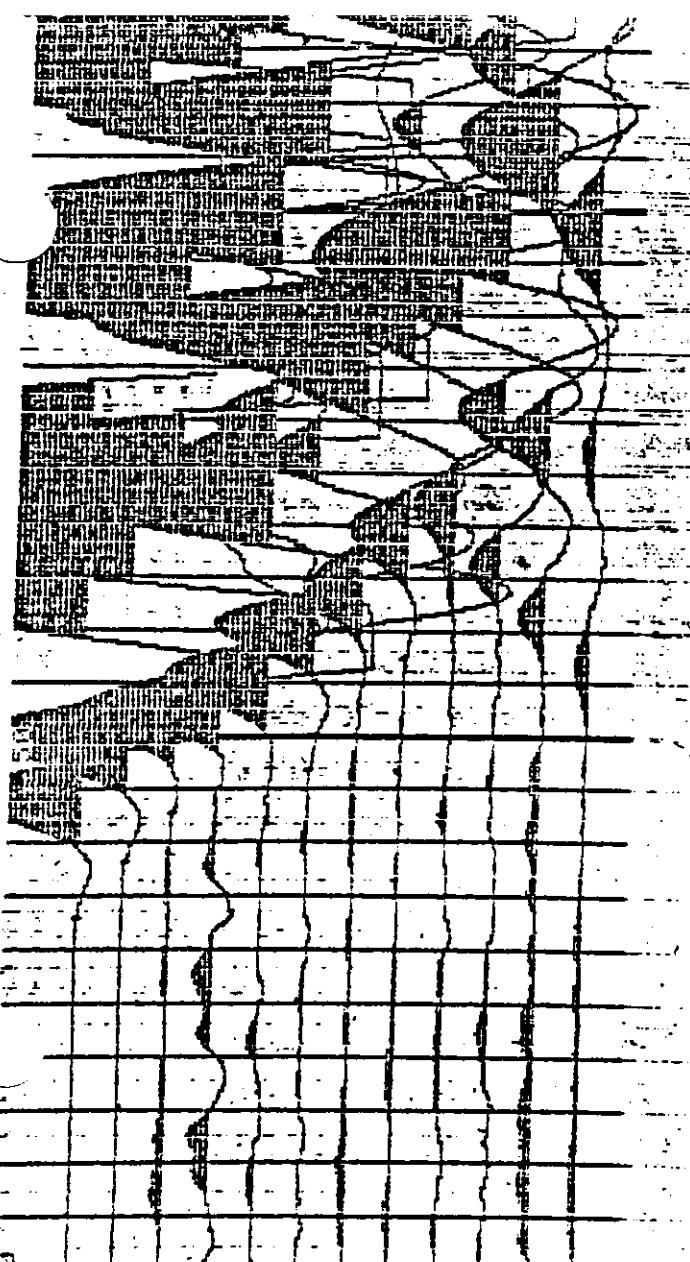
STACK COUNT

10
11
12

FILTER IN

SP-11 LF
2:00 PM
12/23/87

Outside



EG&G GEOMETRICS

ES-1225

FILE NO. 1463

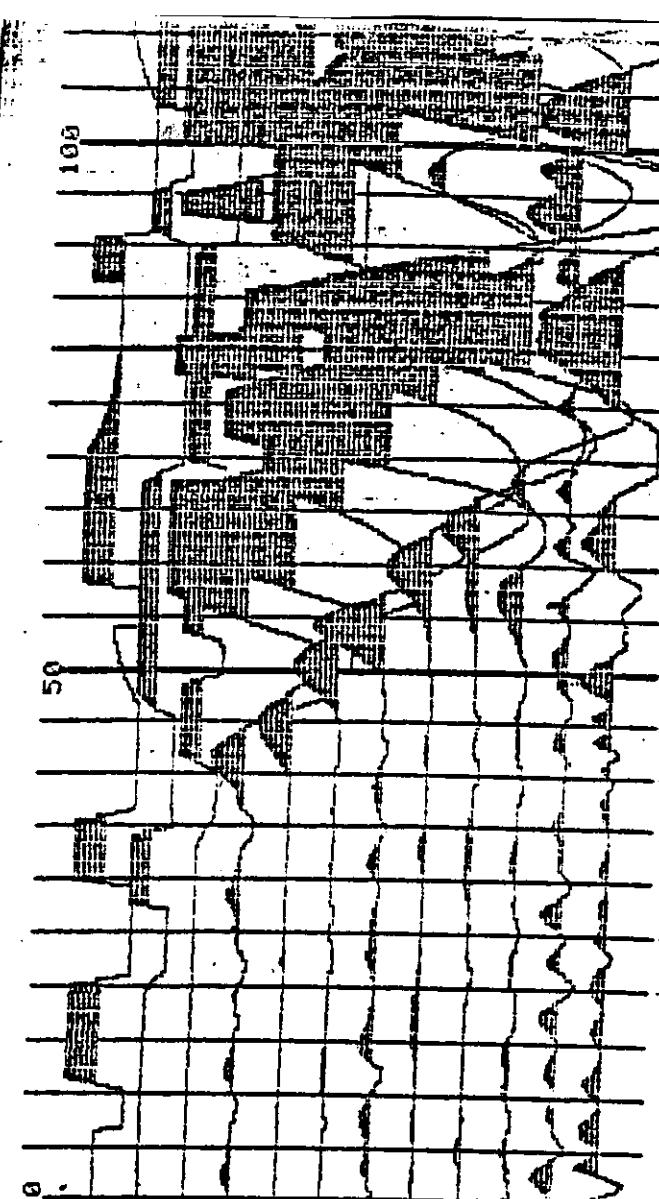
RECORD TIME
250 MSEC

DELAY TIME
0 MSEC

STACK COUNT

1
2
3
4
5
6
7
8
9
10
11
12

FILTER IN



SP-11 F
2:05 PM
12/23/87

Outside

0005-2

AR000542

EG&G GEOMETRICS

ES-1225 VERSION 2.0 CH GN TS
FILE NO. 1463 1 160 191
2 60 161
3 60 181

RECORD TIME 4 60 121

250 MSEC 5 60 131

DELAY TIME 6 60 141

0 MSEC 7 60 151

STACK COUNT 8 60 161

1 9 60 171

FILTER IN 10 60 181

11 60 191

12 60 131

SP-12 LR
2:45PM
12/23/87

Outside

EG&G GEOMETRICS

ES-1225 VERSION 2.0 CH GN TS
FILE NO. 1463 1 160 191
2 60 161
3 60 181

RECORD TIME 4 60 111

250 MSEC 5 60 131

DELAY TIME 6 60 91

0 MSEC 7 60 101

STACK COUNT 8 60 91

9 54 101

10 48 111

11 42 111

12 36 61

FILTER IN

SP-12 R

2:39
12/23/87

Outside

6005-3

AR000543

EGG GEOMETRICS

ES-125 VERSION 2.0

FILE NO 1463

RECORD TIME

250 MSEC

DELAY TIME

0 MSEC

STACK COUNT

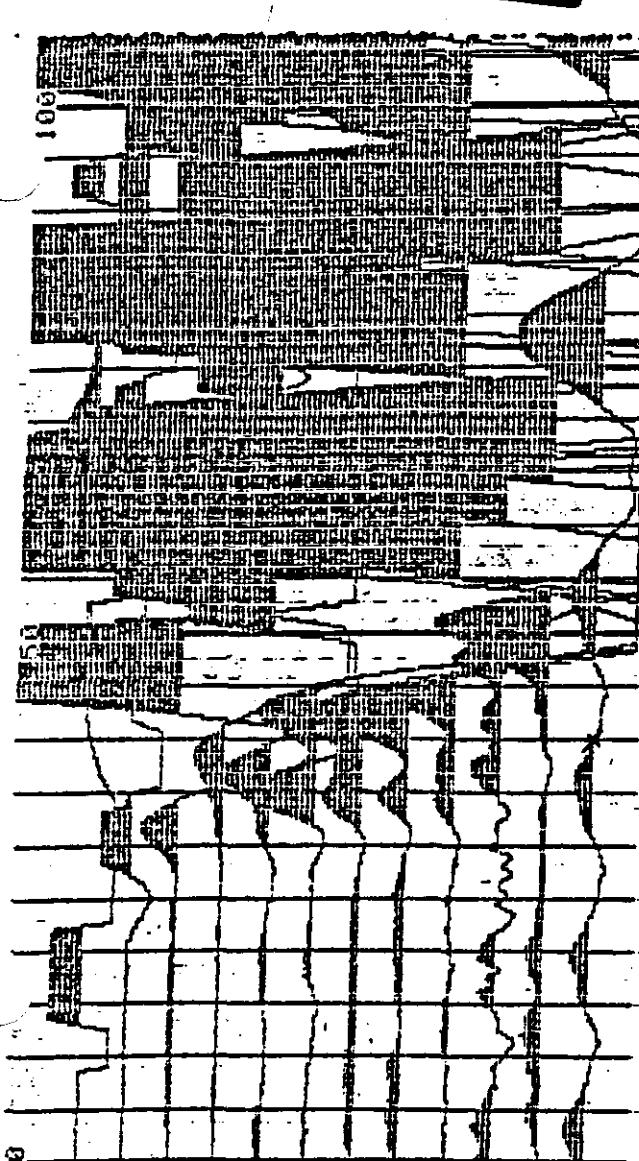
1

FILTER IN

12 60 13

SP-12
2:33 PM
12/23/93

Outside



EGG GEOMETRICS

ES-125 VERSION 2.0

FILE NO 1463

RECORD TIME

250 MSEC

DELAY TIME

0 MSEC

STACK COUNT

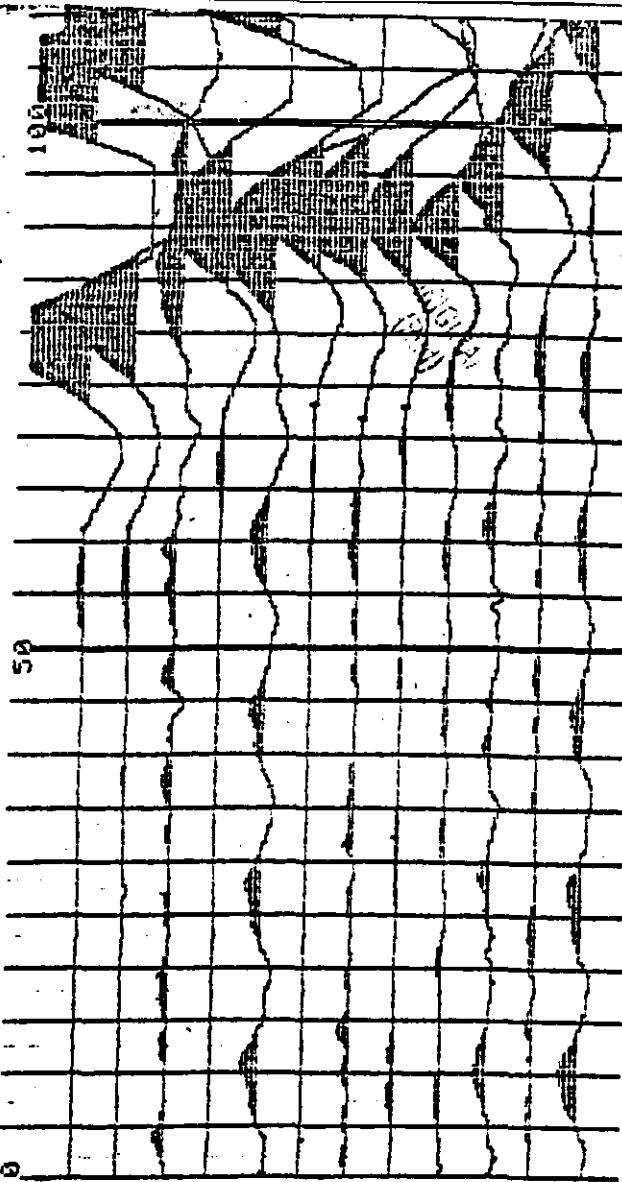
1

FILTER IN

12 60 13

SP-12 LF
2:30 PM
12/23/93

AR000544



000544

EGG GEOMETRICS

ES-125
VERSION 2.0
FILE NO 1463
RECORD TIME 250 MSEC
CH GH TS
1 36 9
2 42 9
3 48 8
4 54 15
5 60 13
6 60 14
7 60 14
8 60 18
9 60 17
10 60 17
11 60 16
12 60 17
0 MSEC
STACK COUNT
FILTER IN

SP-13F

3:27 PM
12/23/87

Outside

2005 CS

EGG GEOMETRICS

ES-125
VERSION 2.0
FILE NO 1463
RECORD TIME 250 MSEC
CH GH TS
1 60 14
2 60 16
3 60 18
4 60 18
5 60 16
6 60 17
7 60 18
8 60 18
9 60 18
10 60 18
11 60 19
12 60 18
0 MSEC
STACK COUNT
FILTER IN

SP-13 LF

3:23 PM
12/23/87

Outside

AR000545

E&G GEOMETRICS
EST-VERSION 2.0

SP-13R

5:41 PM
12/23/87

FILE NO 1463

RECORD TIME

250 MSEC

DELAY TIME

0 MSEC

STACK COUNT

9 60 15

10 60 15

11 60 14

FILTER IN

12 60 13

E&G GEOMETRICS
EST-VERSION 2.0

FILE NO 1463

RECORD TIME

250 MSEC

DELAY TIME

0 MSEC

STACK COUNT

7 60 15

8 60 12

9 54 16

10 48 10

11 42 9

12 36 8

FILTER IN

SP-13R

3:35

12/23/87

000546

AR000546

Outside

Outside

EE&G GEOMETRICS

ES-1225 VERSION 2.0

FILE NO 1463

RECORD TIME

500 MSEC

DELAY TIME

0 MSEC

STACK COUNT

9 54 8

FILTER IN

1 10 49 9

11 42 9

12 36 9

SP-14 R
9:43 AM
12/28/87

DORNEY LANDFILL
Outside

EE&G GEOMETRICS

ES-1225 VERSION 2.0

FILE NO 1463

RECORD TIME

500 MSEC

DELAY TIME

0 MSEC

STACK COUNT

1 9 60 12

FILTER IN

12 69 8

SP-14 LR
9:53 AM
12/28/87

DORNEY
LANDFILL
Outside

0005-7 AR000547

EG&G GEOMETRICS
VERSION 2.0
FILE NO. 1463

RECORD TIME
500 MSEC

DELAY TIME
0 MSEC

STACK COUNT
1

FILTER IN
12 60 15

CH GN TS
1 36 9
2 42 19
3 48 8
4 54 12

100

50

0

-50

-100

-150

-200

-250

-300

-350

-400

-450

-500

-550

-600

DORNEY LANDFILL
REL LENGTH = 500ms
dM

SP- 14 F
9:36 AM
12/28/87

000548

EG&G GEOMETRICS
VERSION 2.0
FILE NO. 1463

RECORD TIME
250 MSEC

DELAY TIME
0 MSEC

STACK COUNT
1

FILTER IN
12 60 17

CH GN TS
1 60 16
2 60 19

3 60 16

4 60 16

5 60 18

6 60 18

7 60 17

8 60 17

9 60 17

10 60 18

11 60 17

12 60 17

13 60 17

14 60 17

15 60 18

16 60 18

17 60 18

18 60 18

19 60 18

20 60 18

21 60 18

22 60 18

23 60 18

24 60 18

25 60 18

26 60 18

27 60 18

28 60 18

29 60 18

30 60 18

31 60 18

32 60 18

33 60 18

34 60 18

35 60 18

36 60 18

37 60 18

38 60 18

39 60 18

40 60 18

41 60 18

42 60 18

43 60 18

44 60 18

45 60 18

46 60 18

47 60 18

48 60 18

49 60 18

50 60 18

51 60 18

52 60 18

53 60 18

54 60 18

55 60 18

56 60 18

57 60 18

58 60 18

59 60 18

60 60 18

61 60 18

62 60 18

63 60 18

64 60 18

65 60 18

66 60 18

67 60 18

68 60 18

69 60 18

70 60 18

71 60 18

72 60 18

73 60 18

74 60 18

75 60 18

76 60 18

77 60 18

78 60 18

79 60 18

80 60 18

81 60 18

82 60 18

83 60 18

84 60 18

85 60 18

86 60 18

87 60 18

88 60 18

89 60 18

90 60 18

91 60 18

92 60 18

93 60 18

94 60 18

95 60 18

96 60 18

97 60 18

98 60 18

99 60 18

100 60 18

101 60 18

102 60 18

103 60 18

104 60 18

105 60 18

106 60 18

107 60 18

108 60 18

109 60 18

110 60 18

111 60 18

112 60 18

113 60 18

114 60 18

115 60 18

116 60 18

117 60 18

118 60 18

119 60 18

120 60 18

121 60 18

122 60 18

123 60 18

124 60 18

125 60 18

126 60 18

127 60 18

128 60 18

129 60 18

130 60 18

131 60 18

132 60 18

133 60 18

134 60 18

135 60 18

136 60 18

137 60 18

138 60 18

139 60 18

140 60 18

141 60 18

142 60 18

143 60 18

144 60 18

145 60 18

146 60 18

147 60 18

148 60 18

149 60 18

150 60 18

151 60 18

152 60 18

153 60 18

154 60 18

155 60 18

156 60 18

157 60 18

158 60 18

159 60 18

160 60 18

161 60 18

162 60 18

163 60 18

164 60 18

165 60 18

166 60 18

167 60 18

168 60 18

169 60 18

170 60 18

171 60 18

172 60 18

173 60 18

174 60 18

175 60 18

176 60 18

177 60 18

178 60 18

179 60 18

180 60 18

181 60 18

182 60 18

183 60 18

184 60 18

185 60 18

186 60 18

187 60 18

188 60 18

189 60 18

190 60 18

191 60 18

192 60 18

193 60 18

194 60 18

195 60 18

196 60 18

197 60 18

198 60 18

199 60 18

200 60 18

201 60 18

202 60 18

203 60 18

204 60 18

205 60 18

206 60 18

207 60 18

208 60 18

209 60 18

210 60 18

211 60 18

212 60 18

213 60 18

214 60 18

215 60 18

216 60 18

217 60 18

218 60 18

219 60 18

220 60 18

221 60 18

222 60 18

223 60 18

224 60 18

225 60 18

226 60 18

227 60 18

228 60 18

229 60 18

230 60 18

231 60 18

232 60 18

233 60 18

234 60 18

235 60 18

236 60 18

237 60 18

238 60 18

239 60 18

240 60 18

241 60 18

242 60 18

243 60 18

EG&G GEOMETRICS INC CH GN TS
 ES-1225 VERSION 2.0 1 36 192
 FILE NO 1463 2 42 98
 RECORD TIME 3 48 168
 4 54 185
 5 60 113
 6 60 120
 7 60 149
 8 60 156
 9 60 147
 10 60 156
 11 60 143
 12 60 155
 500 MSEC
 DELAY TIME 0 MSEC
 STACK COUNT
 FILTER IN

SP-15F DORNEY
 LINDFILL
 10:10 AM 12/28/87
 12/28/87

000549

EG&G GEOMETRICS INC CH GN TS
 ES-1225 VERSION 2.0 1 60 14
 FILE NO 1463 2 60 15
 RECORD TIME 3 60 15
 4 60 14
 5 60 15
 6 60 16
 7 60 16
 8 60 16
 9 60 16
 10 60 16
 11 60 16
 12 60 15
 500 MSEC
 DELAY TIME 0 MSEC
 STACK COUNT
 FILTER IN

SP-15LF DORNEY
 LINDFILL
 10:08 AM 12/28/87

AR000549

EG&G GEOMETRICS
EST-1225

VERSION 2.0
FILE NO 1463

RECORD TIME

500 MSEC

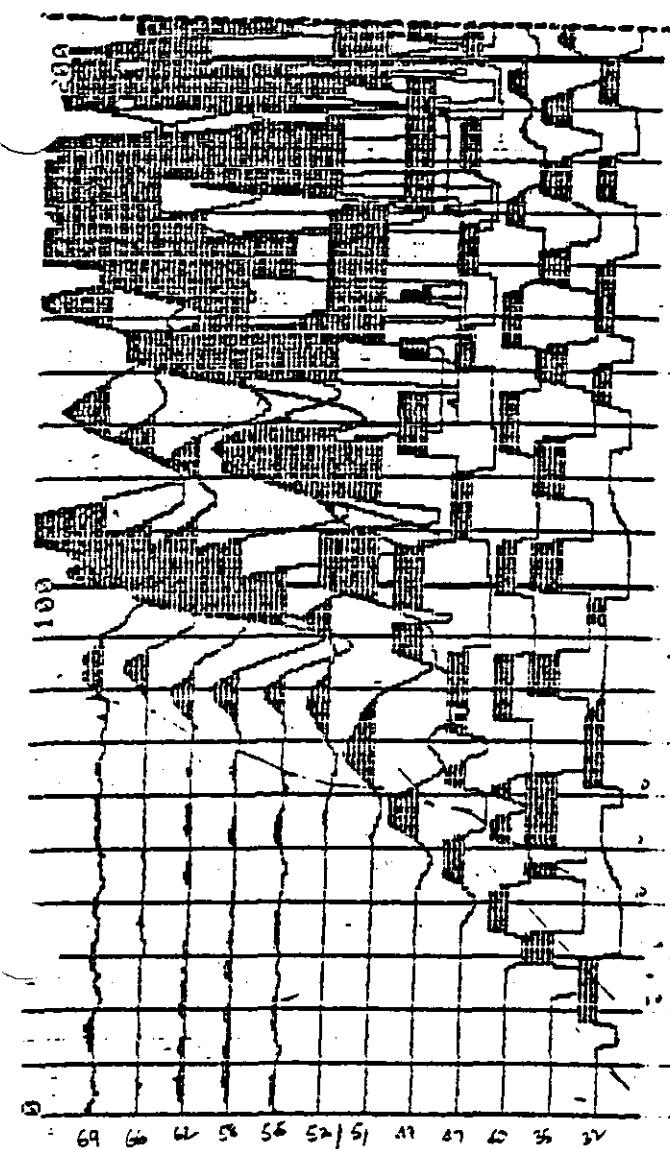
DELAY TIME

0 MSEC

STACK COUNT

1

FILTER IN



SP-15R

11:17AM

DORNEY
LANDFILL

Outside

12/28/87

EG&G GEOMETRICS
EST-1225

VERSION 2.0
FILE NO 1463

RECORD TIME

500 MSEC

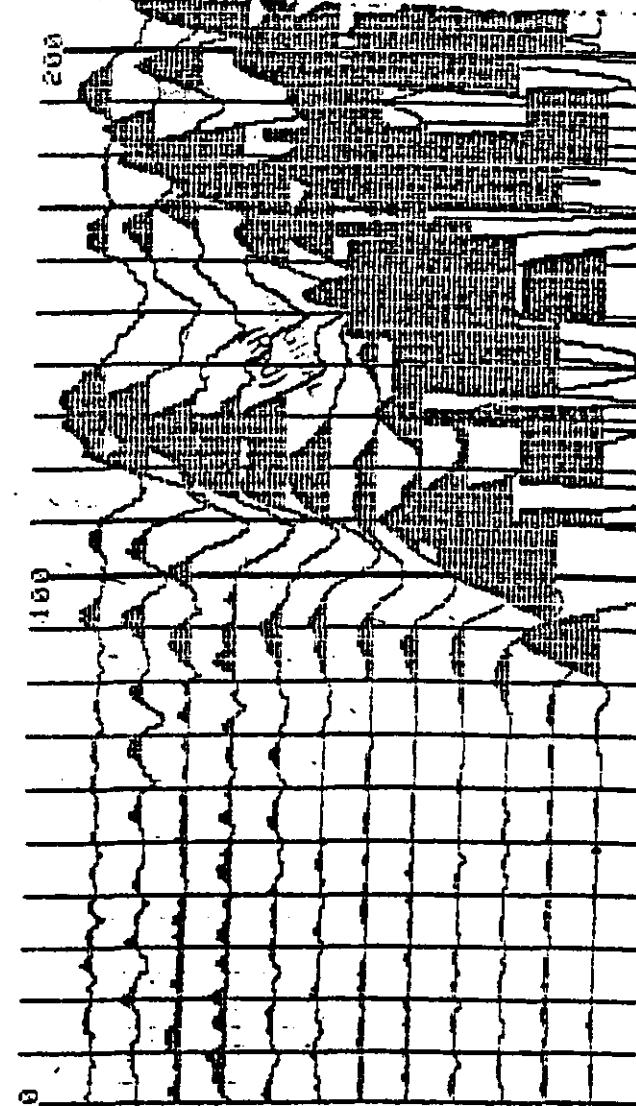
DELAY TIME

0 MSEC

STACK COUNT

1

FILTER IN



SP-15 LR

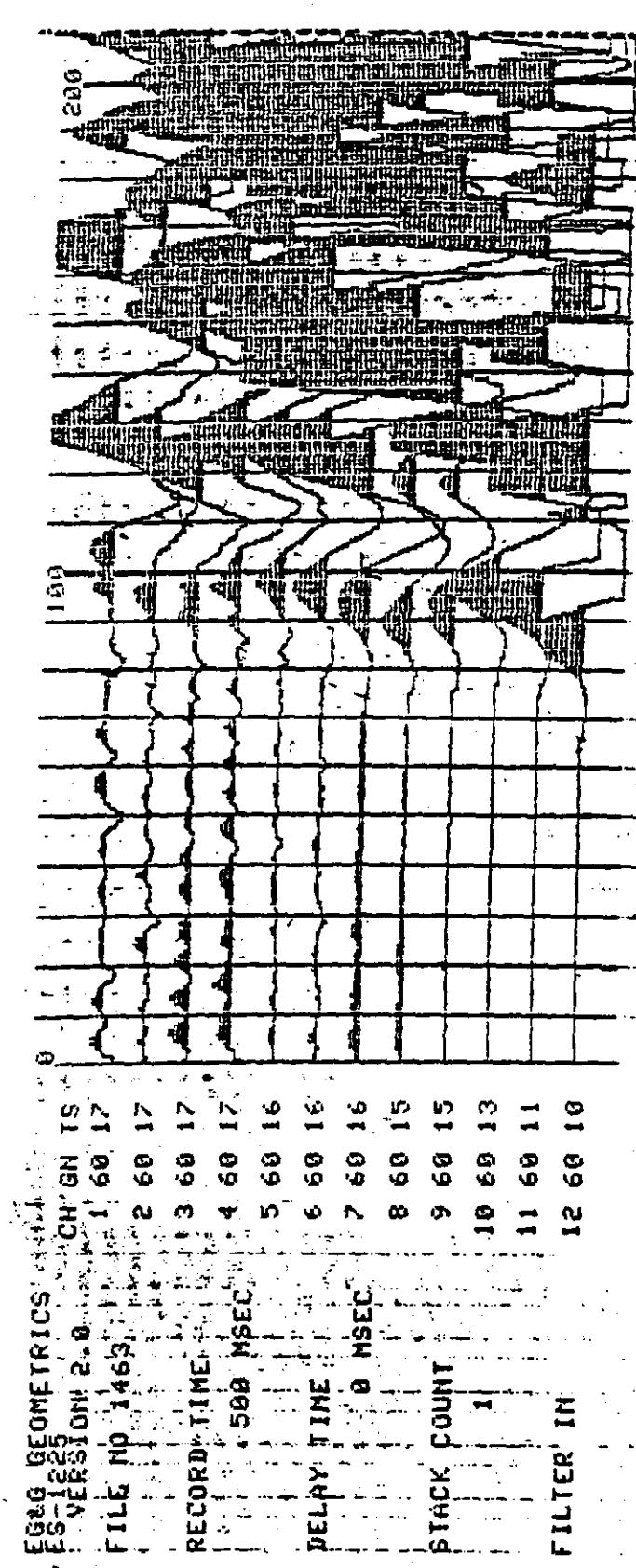
10:30AM

12/28/87

DORNEY
LANDFILL

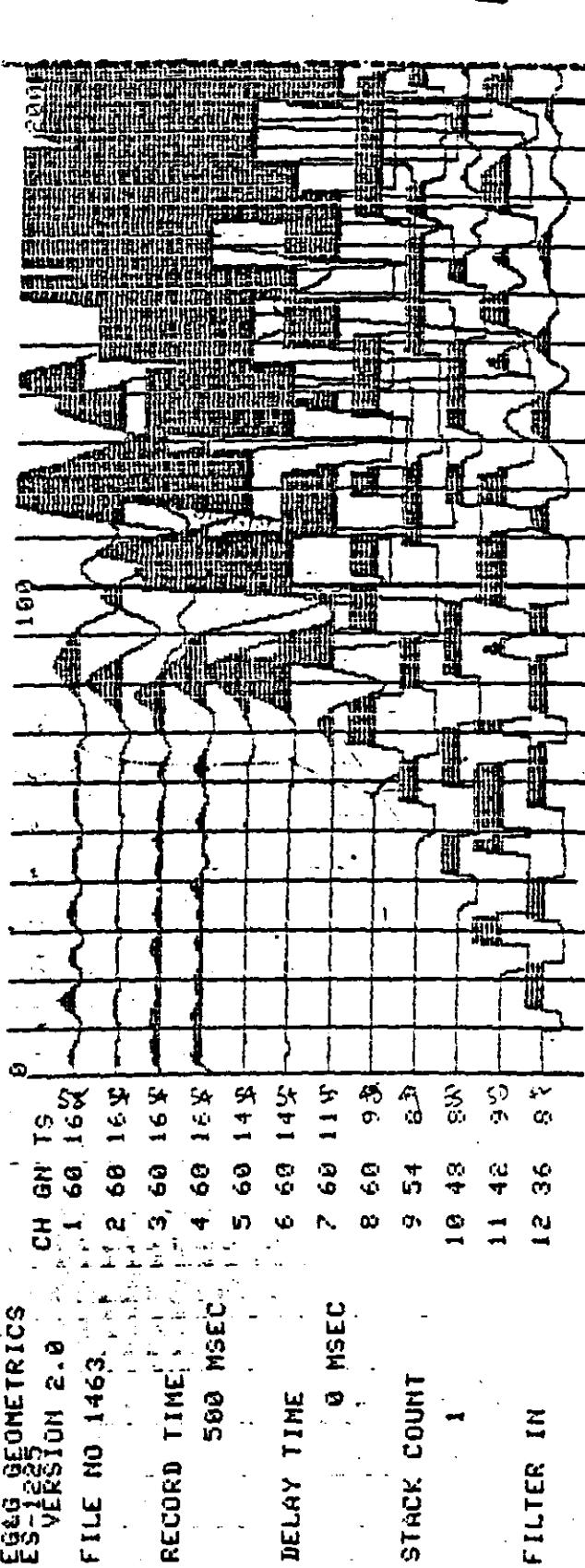
Outside

JGE000550
AR000550



SP-16 LR DORNEY
11:17 AM LANZ FILL
12/28/87 Outside

0000551



SP-16 LR DORNEY
11:12 AM LANZ FILL
12/28/87 Outside

AR000551

EG&G GEOMETRICS
EST-1225
VERSION 2.0
FILE NO 1463

RECORD TIME 1 500 MSEC 4 54 108
DELAY TIME 2 60 115
STACK COUNT 3 60 165
FILTER IN 4 60 148
1 60 145
9 60 149
10 60 156
11 60 142
12 60 158

SP-1GF

DORNEY

11:09 AM

LANDFILL

12/28/87

Outside

AR000552

EG&G GEOMETRICS
EST-1225
VERSION 2.0
FILE NO 1463

RECORD TIME 1 60 14
500 MSEC 2 60 15
3 60 15
4 60 16
5 60 17
6 60 16
7 60 16
8 60 16
9 60 16
10 60 17
11 60 16
12 60 16

SP-1GLF

DORNEY

11:03 AM

12/28/87

Outside

000552

EG&G GEOMETRICS
VERSION 2.0

FILE NO 1463

RECORD TIME

500 MSEC

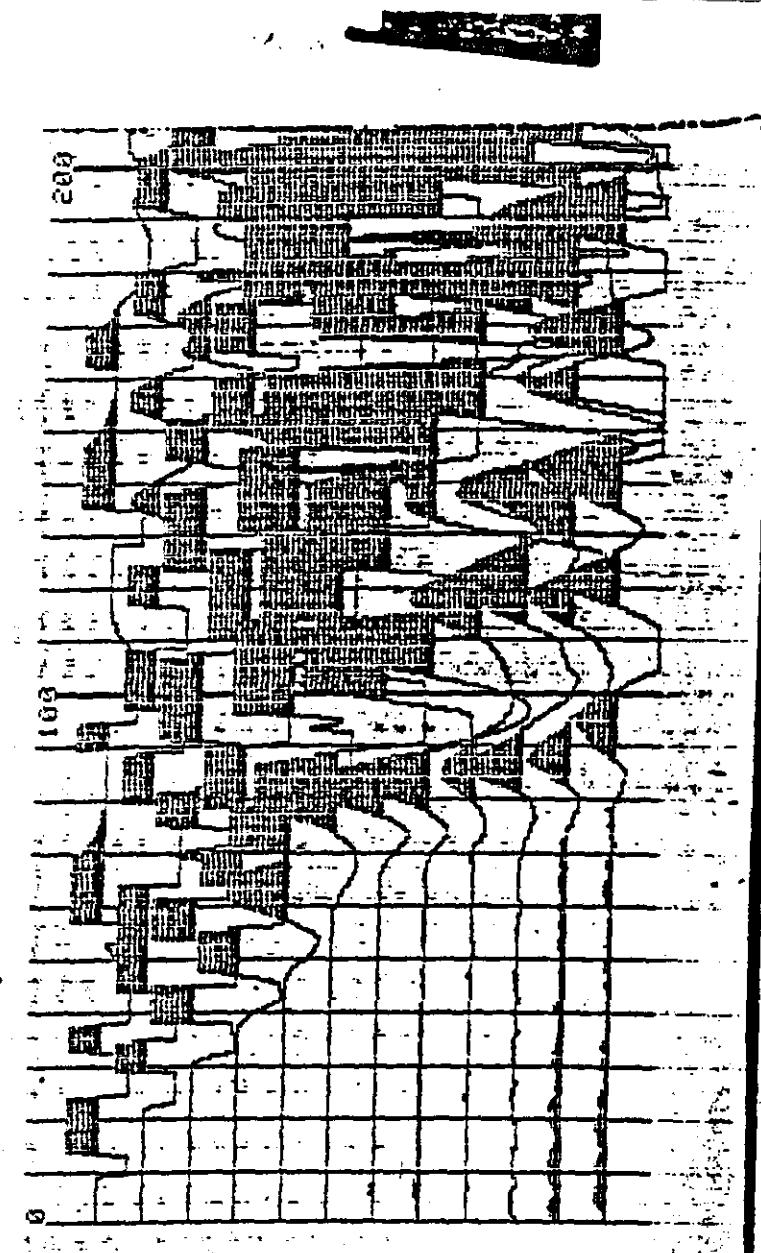
DELAY TIME

0 MSEC

STACK COUNT

1

FILTER IN



SP-17F

DORNEY

11:43 AM

LANDFILL

12/28/82

Outside

000553

AR000553

EG&G GEOMETRICS
VERSION 2.0

FILE NO 1463

RECORD TIME

500 MSEC

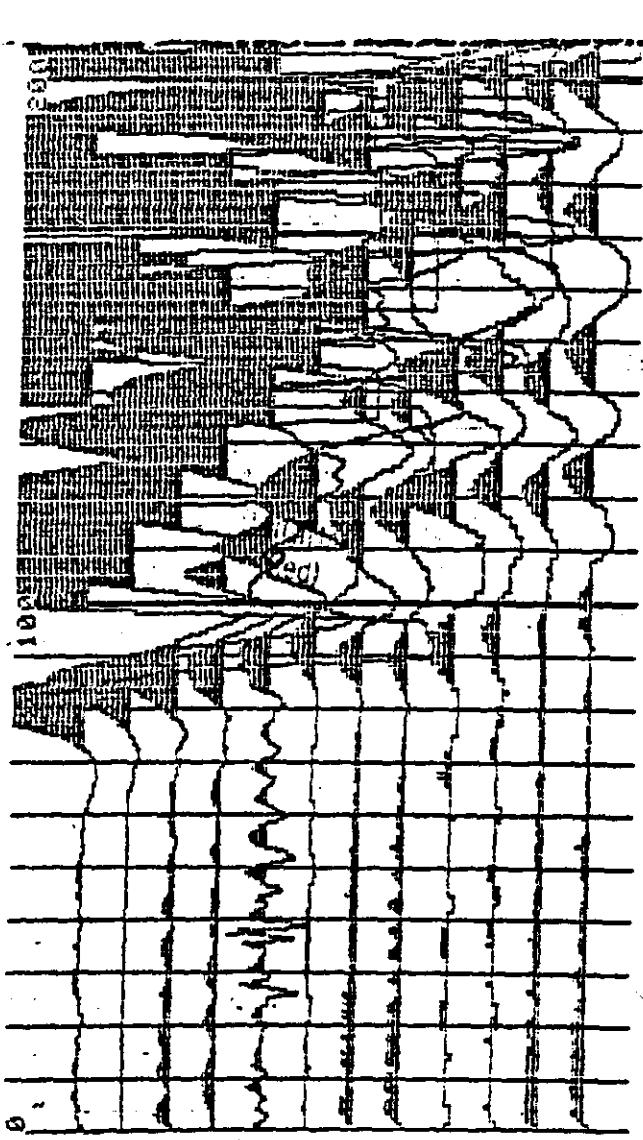
DELAY TIME

0 MSEC

STACK COUNT

1

FILTER IN



SP-17 LF

DORNEY

11:41 AM

LANDFILL

12/28/82

Outside

EGG GEOMETRICS
VERSION 2.0
FILE NO 1463

RECORD TIME
500 MSEC
DELAY TIME
0 MSEC

STACK COUNT

CH GN TS
1 60 16
2 60 16
3 60 15
4 60 15
5 60 15
6 60 13
7 60 11
8 60 9
9 54 8
10 48 8
11 42 8
12 36 8

SP-17R

11:42 AM

12/28/80

DORNEY

LANDFILL

Outside

EGG GEOMETRICS
VERSION 2.0
FILE NO 1463

RECORD TIME
500 MSEC
DELAY TIME
0 MSEC

STACK COUNT

CH GN TS
1 60 17
2 60 17
3 60 17
4 60 16
5 60 16
6 60 15
7 60 14
8 60 14
9 60 12
10 60 12
11 60 10
12 60 9

SP-17L

11:52 AM

12/28/80

DORNEY

LANDFILL

Outside

AR000554

AR000554

EG&G GEOMETRICS

EST-1285 VERSION 2.0

FILE NO 1463

RECORD TIME

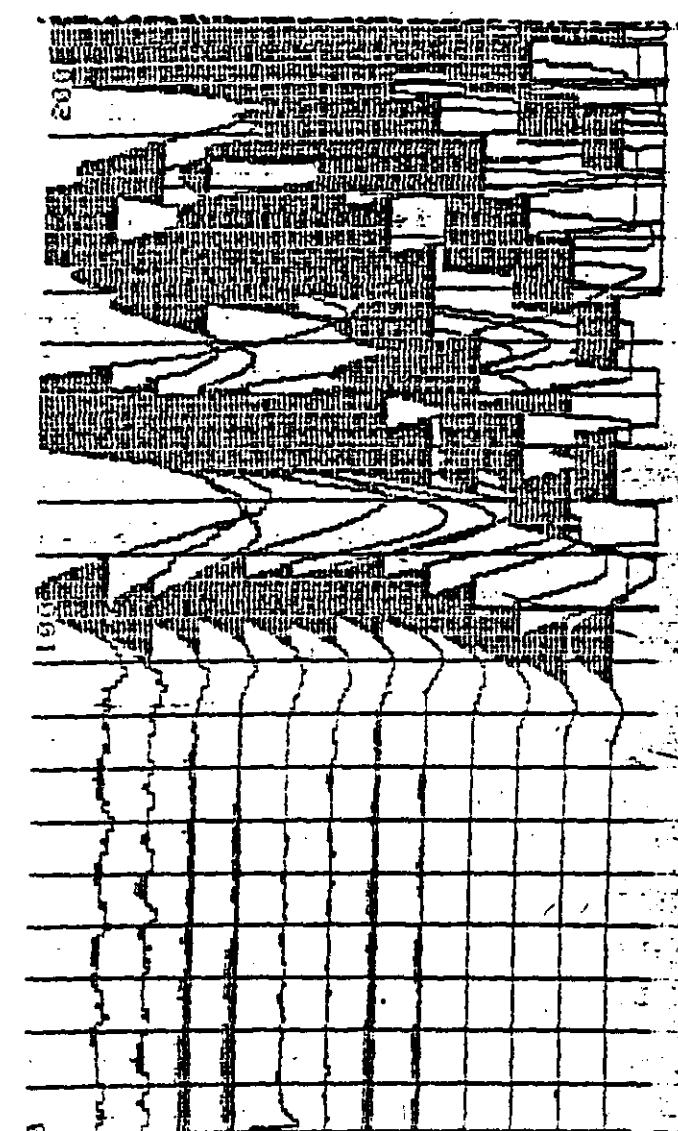
500 MSEC

DELAY TIME 0 MSEC

STACK COUNT 1

DELAY TIME 0 MSEC

FILTER IN



SP-18LR
10:20 AM
12/29/67

DORNEY
LNUOTEL
Outside

EG&G GEOMETRICS

EST-1285 VERSION 2.0

FILE NO 1463

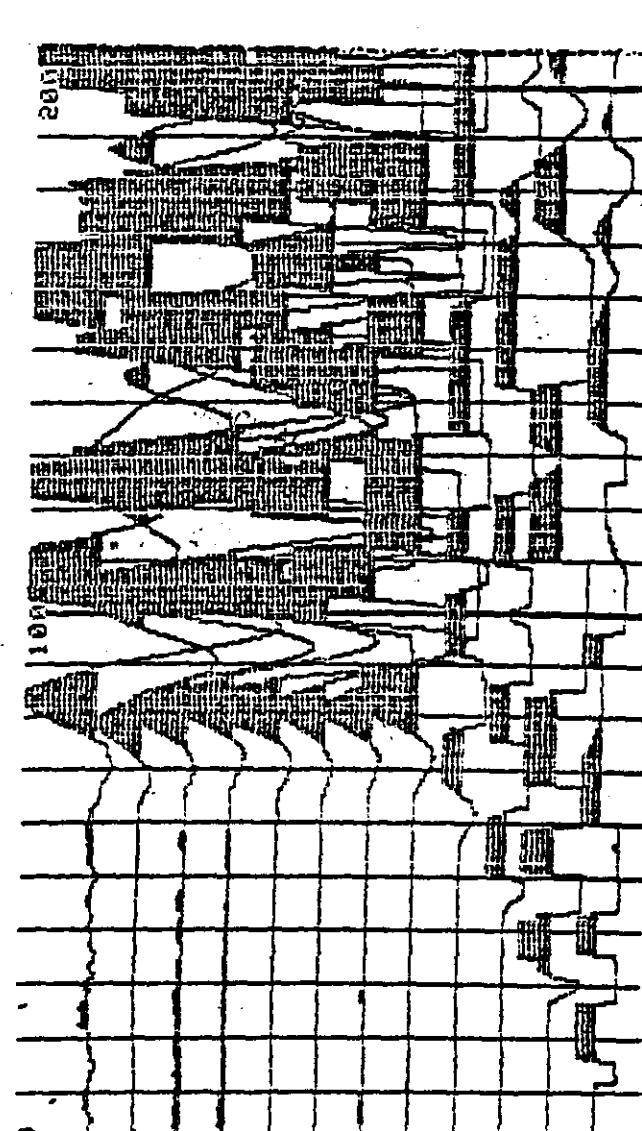
RECORD TIME

500 MSEC

DELAY TIME 0 MSEC

STACK COUNT 1

FILTER IN

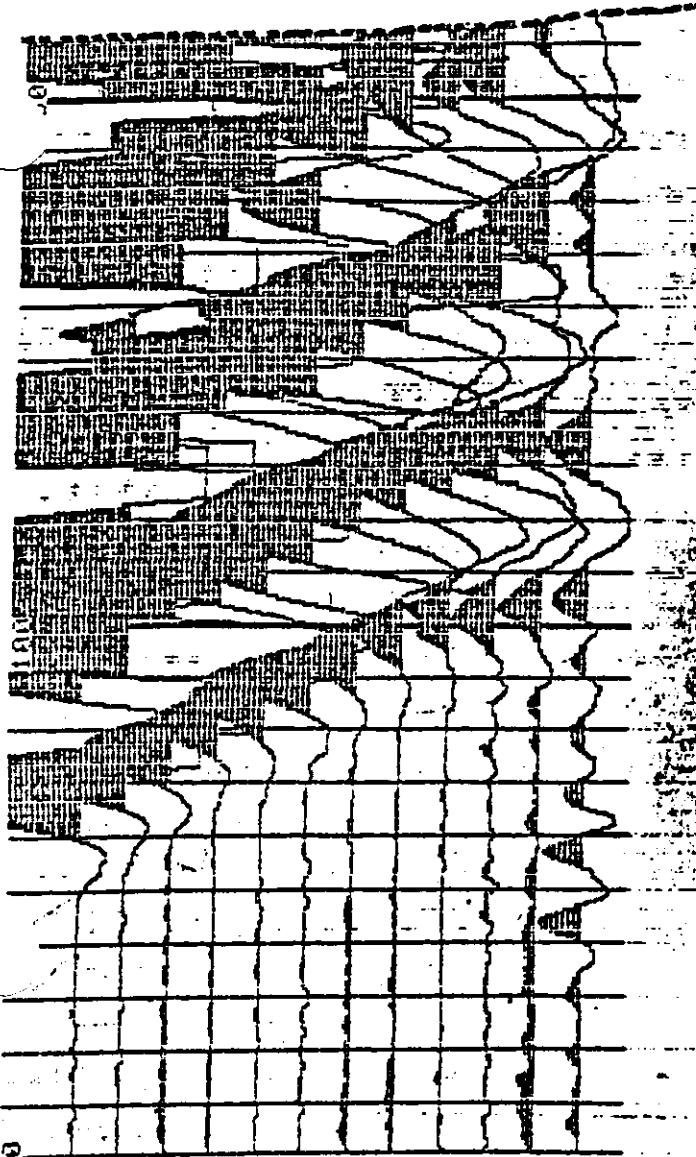


SP-18R
10:22 AM
12/29/67 R000555
DORNEY
LNUOTEL
Outside

EGG GEOMETRICS
 EGG VERSION 2.0
 FILE NO 1463
 RECORD TIME 0 MSEC
 DELAY TIME 500 MSEC
 STACK COUNT 1
 FILTER IN

SP-18 LF DORNEY LANDFILL
 10:17 AM 12/29/87 Outside

AR000556



EGG GEOMETRICS

EGG VERSION 2.0
 FILE NO 1463
 RECORD TIME 0 MSEC
 500 MSEC

DELAY TIME 0 MSEC
 STACK COUNT 1
 FILTER IN

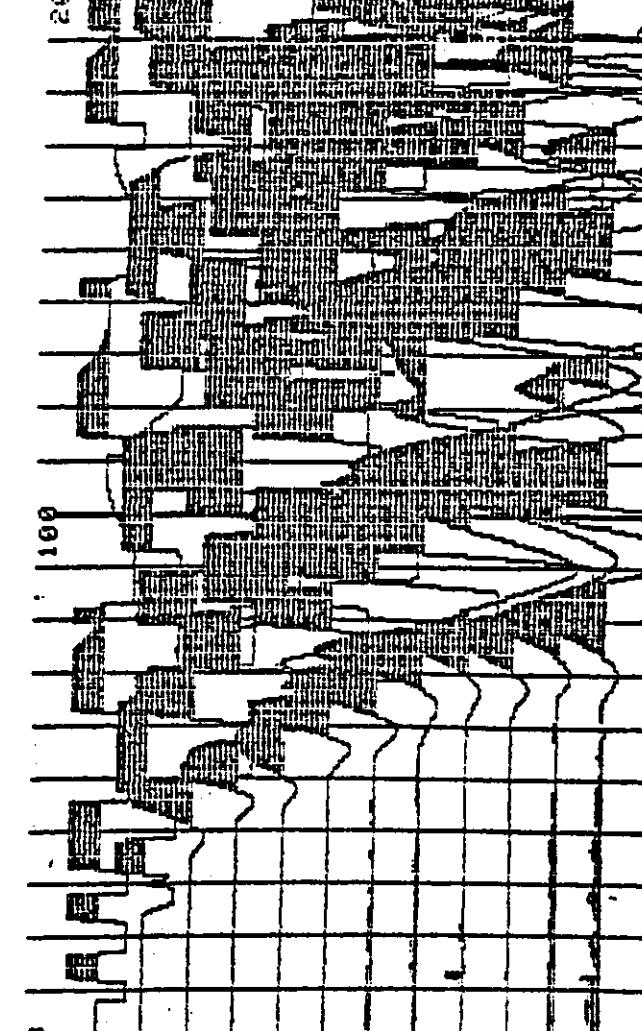
CH GN TS:

1 36 9
 2 42 9

3 48 11
 4 54 11

5 60 12
 6 60 12
 7 60 13
 8 60 14
 9 60 15

200
100
0



SP-18F DORNEY
 10:19 AM LANDFILL
 12/27/87

0.022
 0.032
 1160
 4080
 000558 -100

EGG GEOMETRICS

ES-125 VERSION 2.0

FILE NO 1463

RECORD TIME 500 SEC.

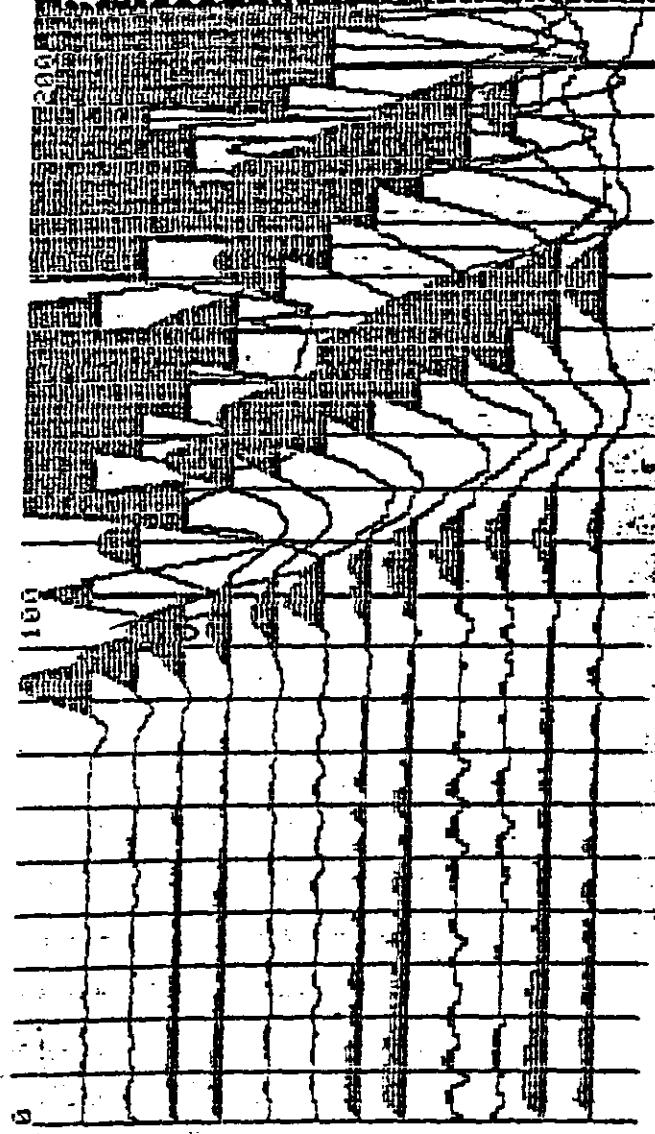
DELAY TIME 0 SEC

STACK COUNT 1

10 60 18

11 60 18

FILTER IN



SP-19LF

10:37 AM

12/24/87

DORNEY

LANDFILL

Outside

000557

EGG GEOMETRICS

ES-125 VERSION 2.0

FILE NO 1463

RECORD TIME 500 SEC.

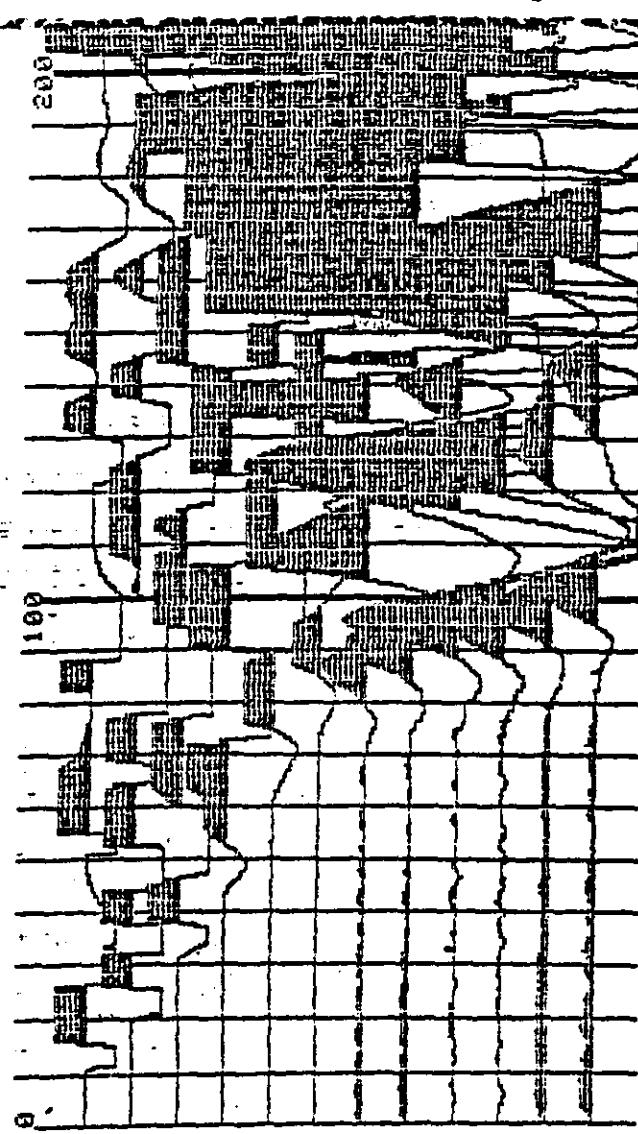
DELAY TIME 0 SEC

STACK COUNT 1

10 60 17

11 60 16

12 60 16



SP-19F

10:40 AM

12/27/87

DORNEY

LANDFILL

Outside

AR000557

EG&G GEOMETRICS
EST-1225 VERSION 2.0
FILE NO 1463

RECORD TIME 500 MSEC
DELAY TIME 0 MSEC
STACK COUNT 1
FILTER IN

SP-19R

10:42AM

12/29/67

DORNEY

LANDFILL

Outside

AR000558

EG&G GEOMETRICS
EST-1225 VERSION 2.0
FILE NO 1463

RECORD TIME 500 MSEC
DELAY TIME 0 MSEC
STACK COUNT 1
FILTER IN

SP-19LR
10:43 AM
12/29/67

DORNEY
LANDFILL
Outside

GO.0558

EG&G GEOMETRICS

ES-1225
VERSION 2.0

FILE NO 1463

RECORD TIME

0500 MSEC

DELAY TIME

0 MSEC

STACK COUNT

1

FILTER IN

9 60' 9

9 54' 8

10 48' 8

11 42' 9

12 36' 8

EG&G GEOMETRICS

ES-1225
VERSION 2.0

FILE NO 1463

RECORD TIME

0500 MSEC

DELAY TIME

0 MSEC

STACK COUNT

1

FILTER IN

9 60' 17

8 60' 16

11 60' 13

12 60' 11

SP-20 R
11:19AM
12/29/87

DORNEY
LANDFILL
Outside

000553

SP-20 LR
11:18 AM
12/29/87

DORNEY
LANDFILL
Outside

AR000559

Egg Geometrics

ES-1225 Version 2.0

FILE NO. 1463

RECORD TIME

500 MSEC

DELAY TIME

9 MSEC

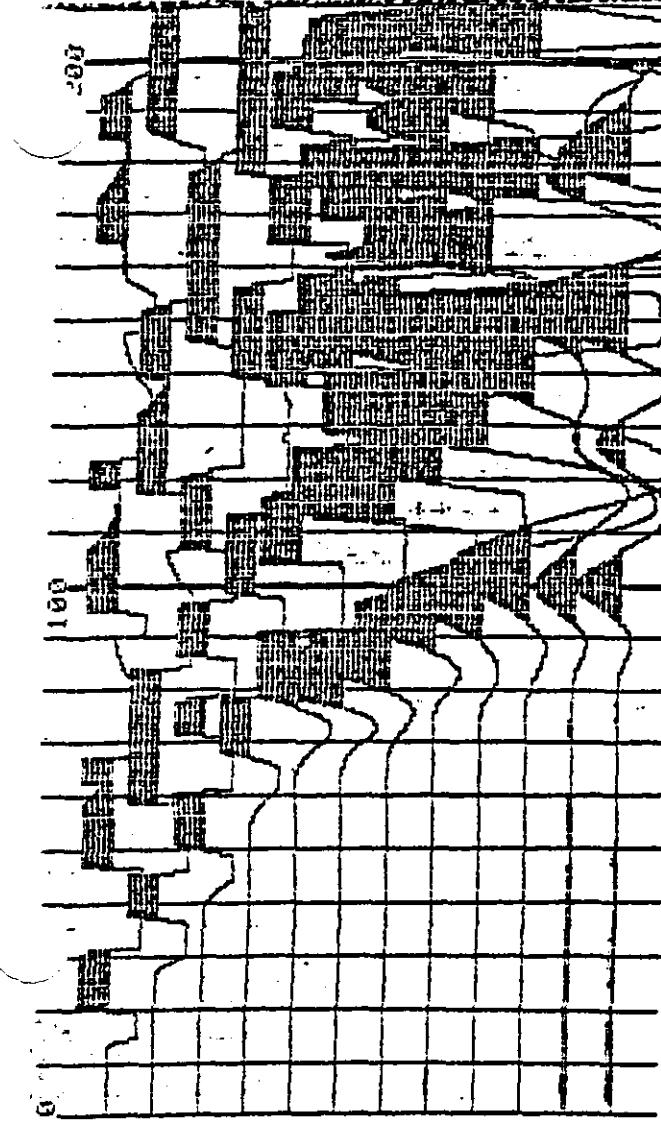
STACK COUNT

14

19 60 15

11 60 14

FILTER IN



Egg Geometrics

ES-1225 Version 2.0

FILE NO. 1463

RECORD TIME

500 MSEC

DELAY TIME

9 MSEC

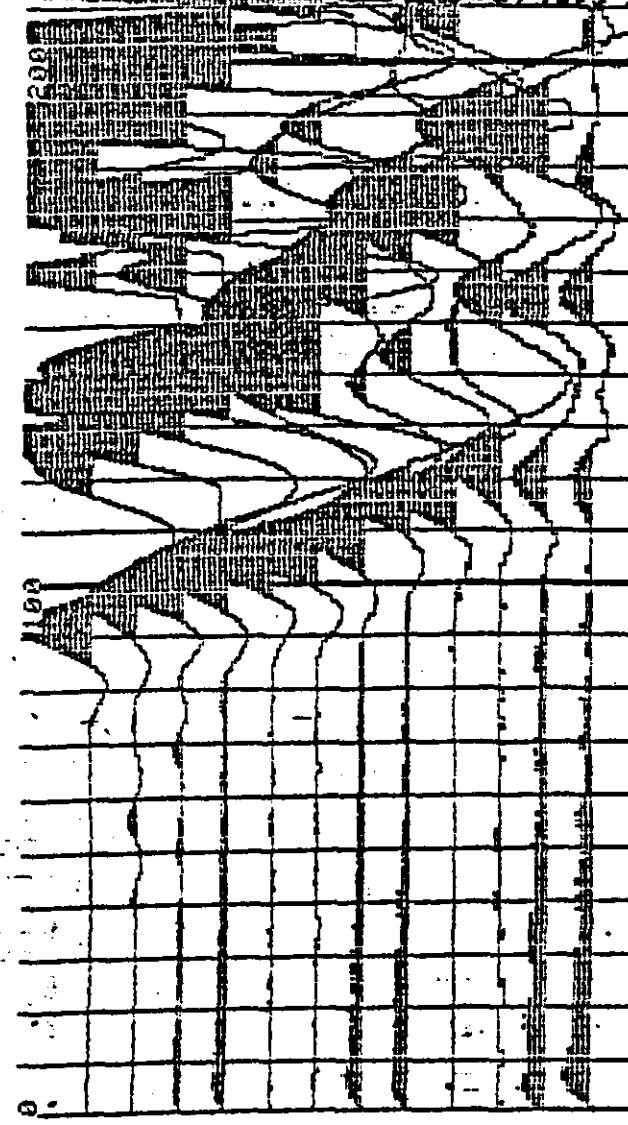
STACK COUNT

1

10 60 18

11 60 18

12 60 18



SP-20F

DORNEY

1112 Am

LANDFILL

Outside

12/29/87

AR000560

SP-20F

DORNEY

11:10 AM

12/29/87

LADDF

Interv

000560

EG&G GEOMETRICS

ES-1225
VERSION 2.0
FILE NO 1463

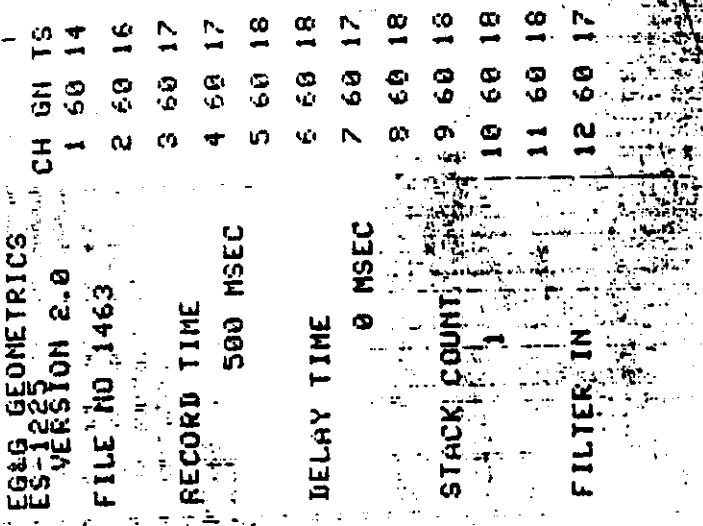
RECORD TIME
500 MSEC

DELAY TIME
0 MSEC

STACK COUNT

1

FILTER IN



SP-21 LF
11:35 AM

12/29/87

DORNEY
LANDFILL

Outside

000561

EG&G GEOMETRICS

ES-1225
VERSION 2.0
FILE NO 1463

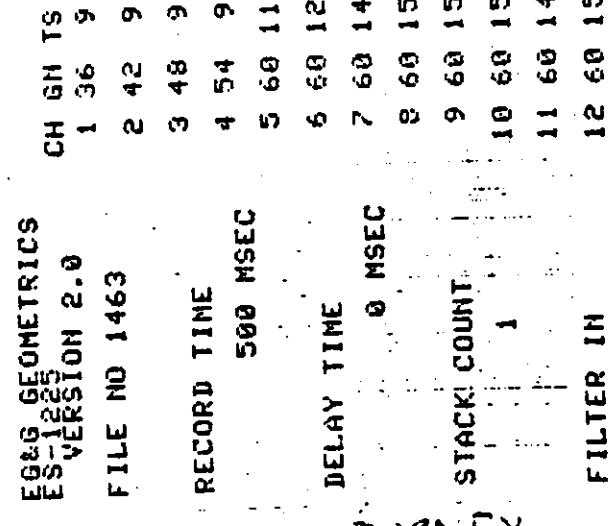
RECORD TIME
500 MSEC

DELAY TIME
0 MSEC

STACK COUNT

1

FILTER IN



SP-21 LF

11:38 AM

12/29/87

DORNEY
LANDFILL

Outside

AR000561

E&G GEOMETRICS
EST-125 VERSION 2.0

FILE NO 1463

RECORD TIME 1 60 18

2 60 16

3 60 13

4 60 14

5 60 14

6 60 14

7 60 14

8 60 13

9 54 8

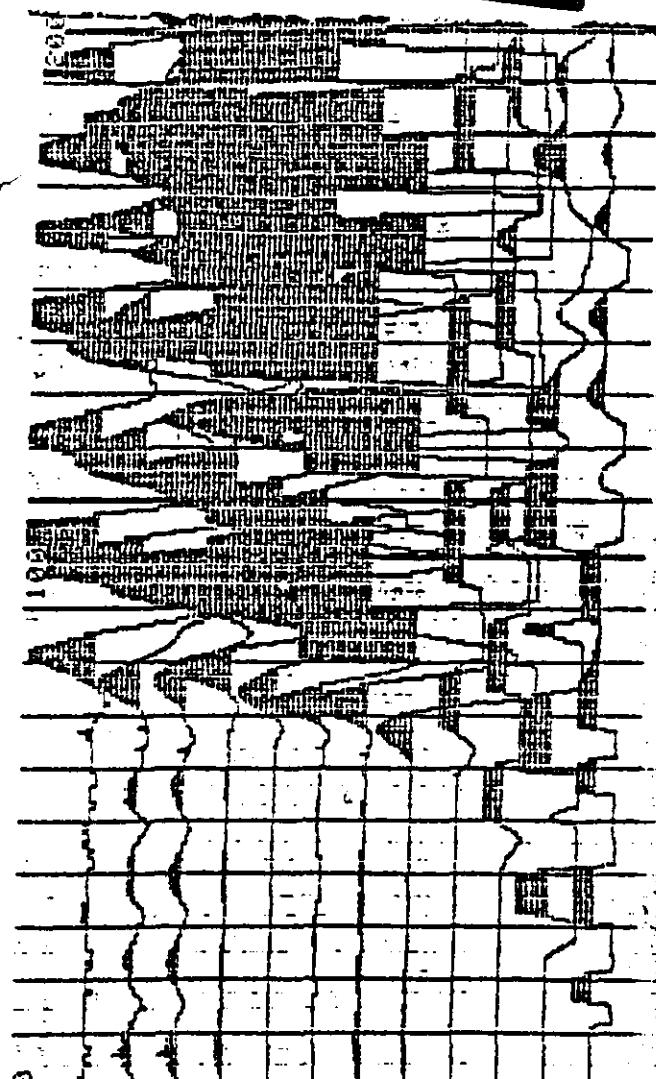
10 48 8

11 42 9

12 36 8

STACK COUNT 1

FILTER IN



SP-21R

DORNEY

11:42AM

LANDFILL

12/29/83

Outside

AR000562

E&G GEOMETRICS
EST-125 VERSION 2.0

FILE NO 1463

CH GN JS

1 60 18

2 60 17

3 60 15

4 60 16

5 60 18

6 60 18

7 60 16

8 60 16

9 60 15

10 60 16

11 60 13

12 60 12

STACK COUNT 1

FILTER IN

SP-21 LR

DORNEY

11:46AM

LANDFILL

12/29/83

Outside

AR000562

EG&G GEOMETRICS
 EST-1225
 VERSION 2.0
 FILE NO 1463
 RECORD TIME 11:59 AM
 500 MSEC
 DELAY TIME 0 MSEC
 STACK COUNT 1
 FILTER IN

SP-22F DORNEY
 11:59AM LANDFILL
 12/29/87 Outside

000563

EG&G GEOMETRICS
 EST-1225
 VERSION 2.0
 FILE NO 1463
 RECORD TIME 11:59 AM
 500 MSEC
 DELAY TIME 0 MSEC
 STACK COUNT 1
 FILTER IN

SP-22LF DORNEY
 11:57AM LANDFILL
 12/29/87 Outside

AR000563

EEG GEOMETRICS
VERSION 2.0

FILE NO 1463

RECORD TIME

500 MSEC

DELAY TIME

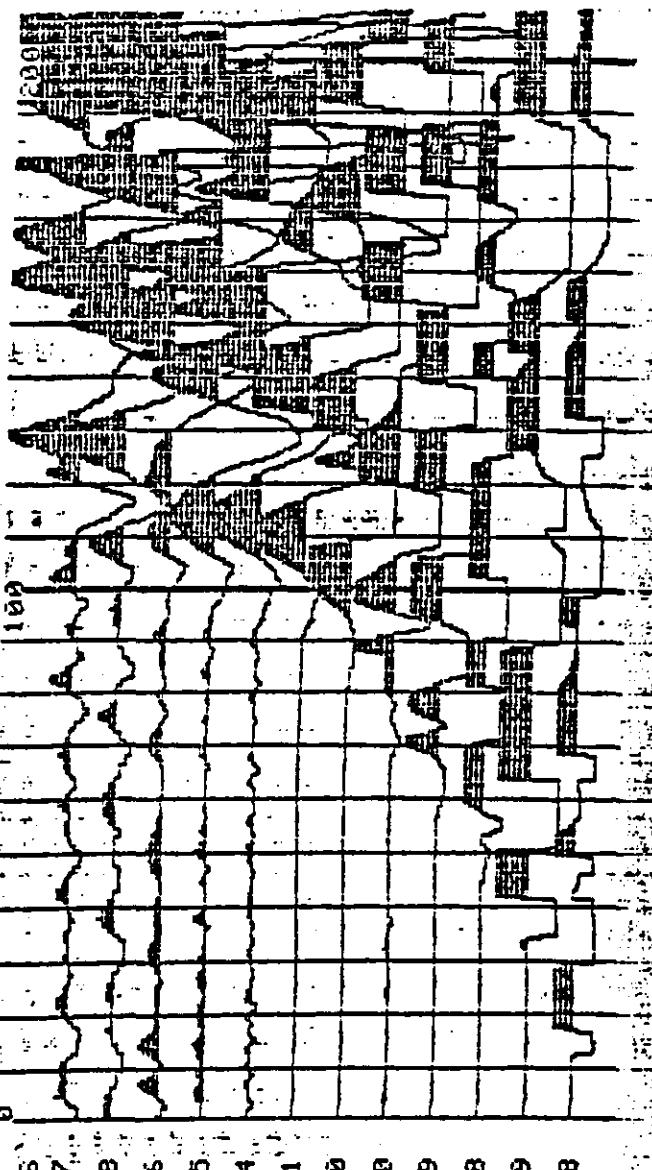
0 MSEC

STACK COUNT

1

FILTER IN

1



SP-22R

DORNEY

12:02 PM

LANDFILL

12/29/87

Outside

EEG GEOMETRICS
VERSION 2.0

FILE NO 1463

RECORD TIME

500 MSEC

DELAY TIME

0 MSEC

STACK COUNT

1

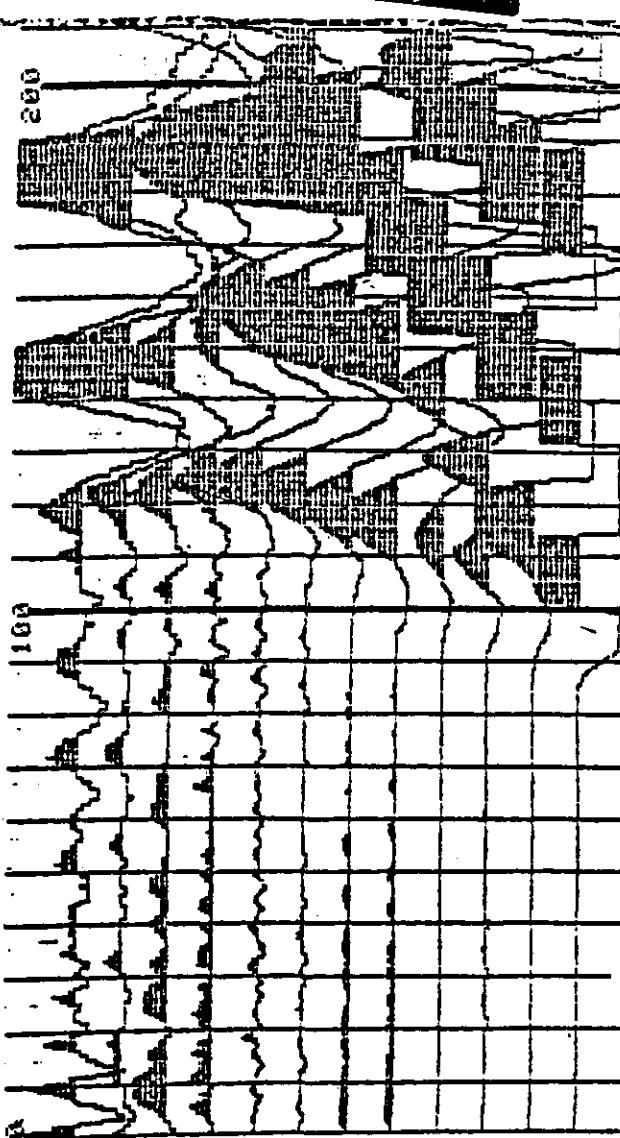
FILTER IN

1

1

1

1



SP-22 LR

DORNEY

12:07 PM

LANDFILL

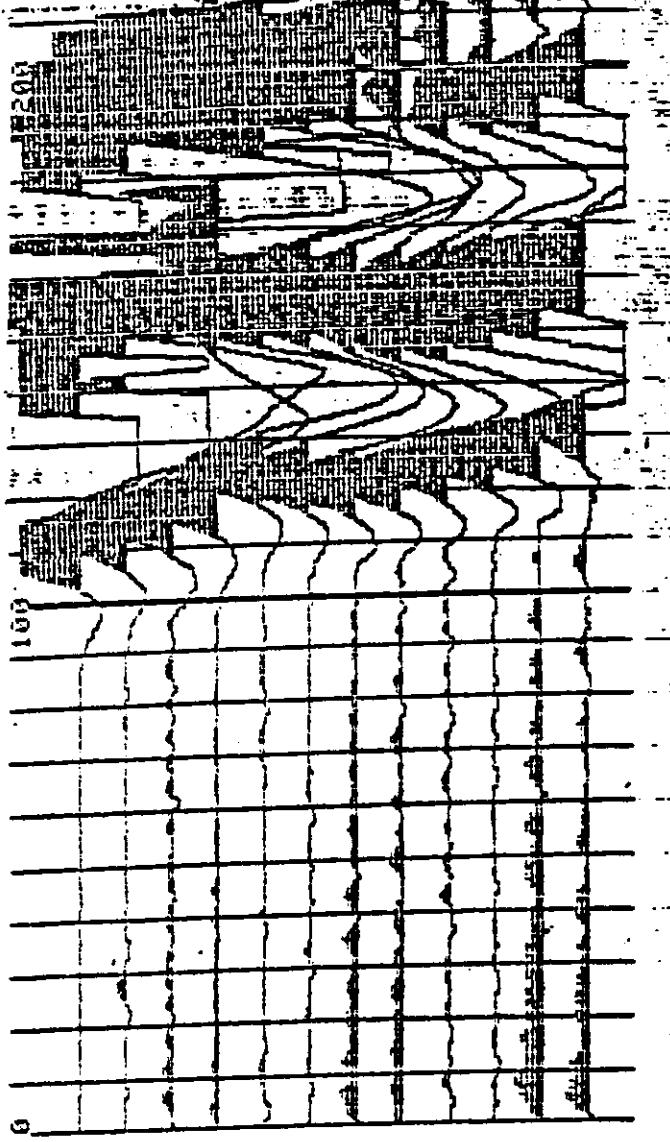
12/29/87

Outside

AR000564

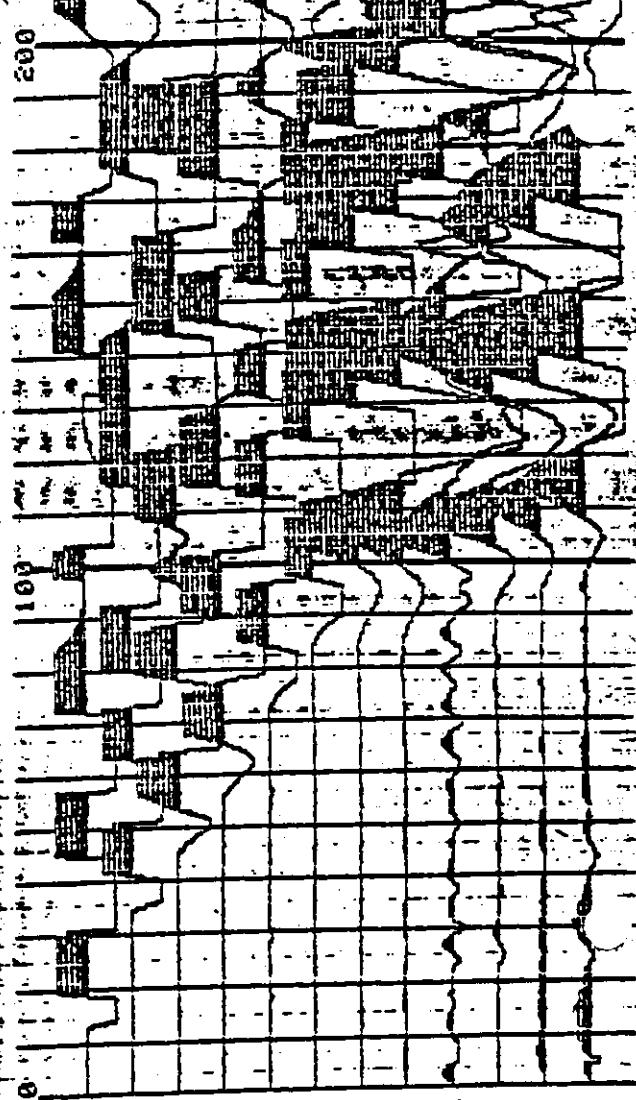
0000564

EG&G GEOMETRICS
 EGG-1225 VERSION 2.0
 FILE NO 1463
 RECORD TIME
 500 MSEC
 DELAY TIME
 0 MSEC
 STACK COUNT
 1
 FILTER IN
 CPT 2 KEY
 LANDFILL
 Outside



000565

EG&G GEOMETRICS
 EGG-1225 VERSION 2.0
 FILE NO 1463
 RECORD TIME
 500 MSEC
 DELAY TIME
 0 MSEC
 STACK COUNT
 1
 FILTER IN
 CPT 2 KEY
 LANDFILL
 Outside



AR000565

ESEG GEOMETRICS

EST 125 VERSION 2.0

FILE NO 1463

CH GN TS

1 60 16

2 60 12

RECORD TIME

3 60 14

4 60 12

500 MSEC

5 60 12

6 60 9

DELAY TIME

7 60 16

8 60 9

STACK COUNT

9 54 8

10 48 8

11 42 9

12 36 9

FILTER IN

SP-123

DOANEV

12/29/87

142000

000000

SP-123

LP

12:42PM

RECORD TIME

3 60 16

4 60 17

DELAY TIME

5 60 15

6 60 15

STACK COUNT

7 60 15

8 60 14

FILTER IN

1 60 12

2 60 11

DOANEV

LANDER

000000

AR000566

12/29/87

000000

AR000566
12/29/87

EGG GEOMETRICS
EST-1225
VERSION 2.0
FILE NO 1463

SP-24R

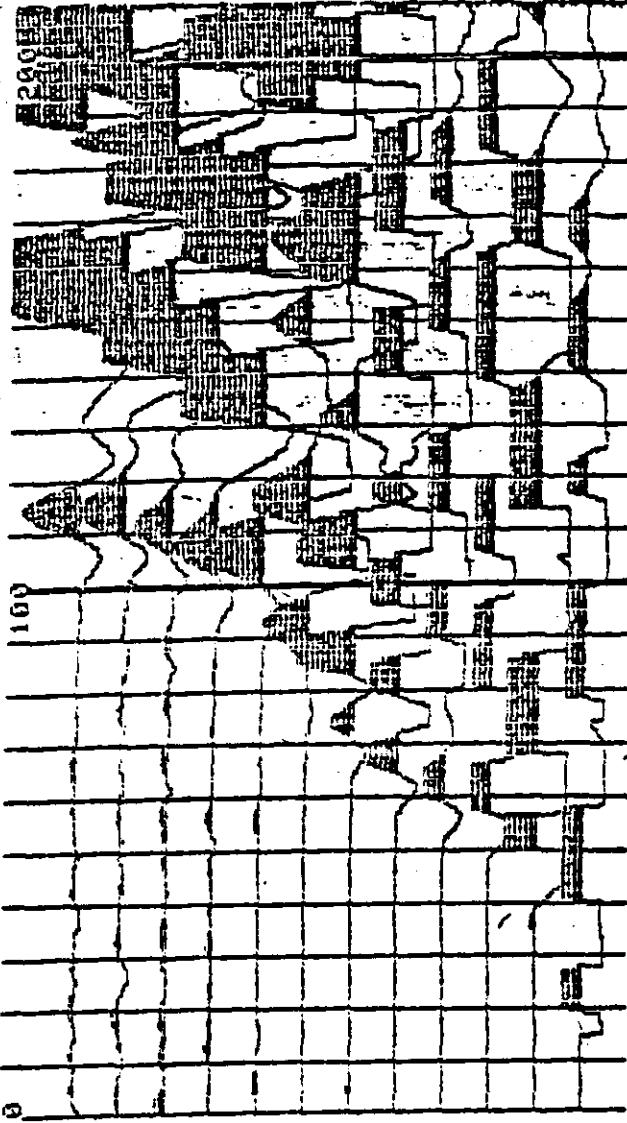
11:00 PM

12/29/87

RECORD TIME 500 MSEC
DELAY TIME 0 MSEC
STACK COUNT 1
FILTER IN

DORNEY
LANDFI
Culots

000559 AR000567



EGG GEOMETRICS
EST-1225
VERSION 2.0
FILE NO 1463

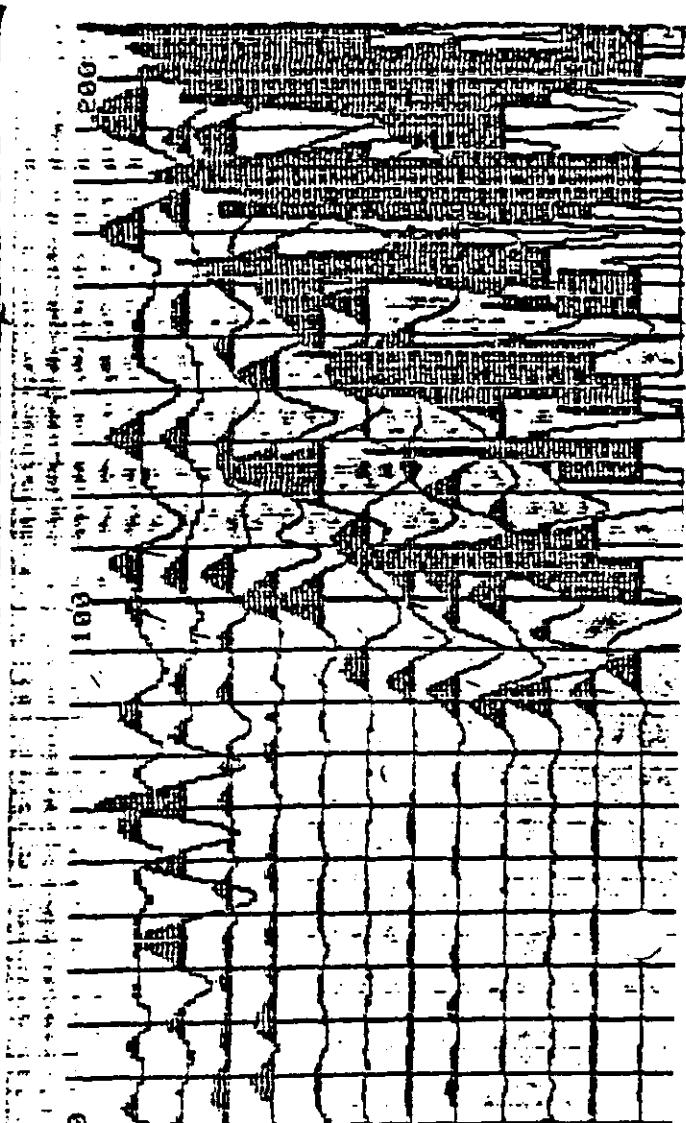
SP-24LR

11:02 PM

12/29/87

RECORD TIME 500 MSEC
DELAY TIME 0 MSEC
STACK COUNT 1
FILTER IN

DORNEY
LANDFI
Culots



EGG GEOMETRICS

ES-1225 VERSION 2.0

FILE NO. 1463

RECORD TIME

500 MSEC

DELAY TIME

0 MSEC

STACK COUNT

9 60 13

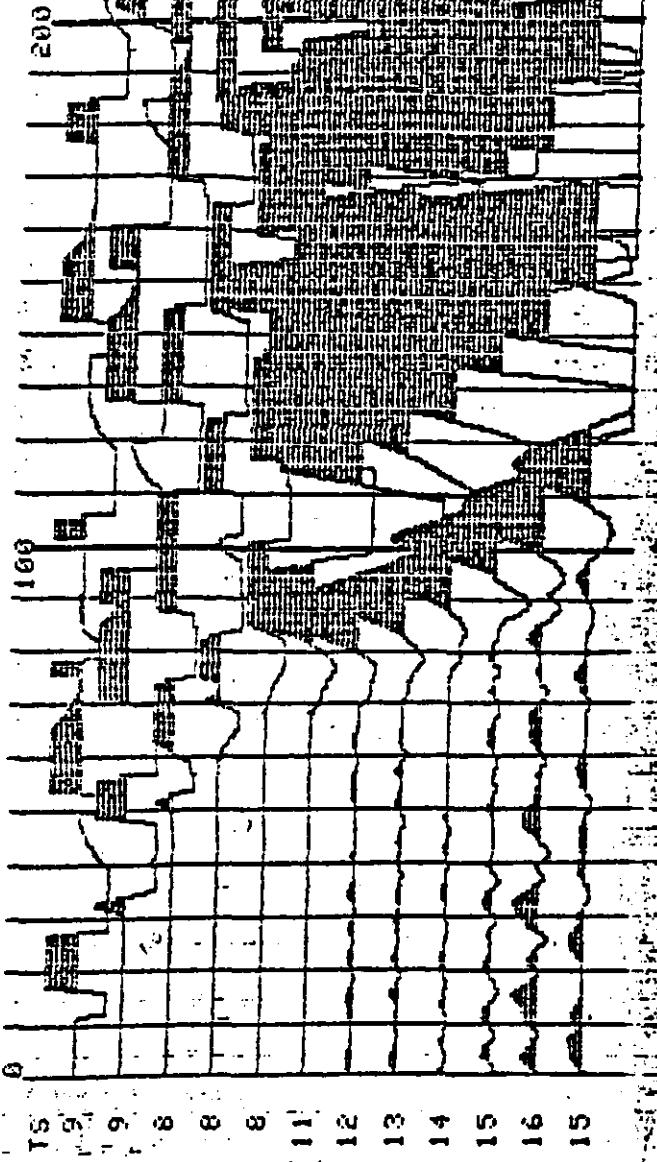
1

10 60 15

11 60 16

12 60 15

FILTER IN



SP-29 F

DORNEY

12:53 PM

L1B-D1C

12/22/82

Outside

AR000568

EGG GEOMETRICS

ES-1225 VERSION 2.0

FILE NO. 1463

RECORD TIME

500 MSEC

DELAY TIME

0 MSEC

STACK COUNT

9 60 13

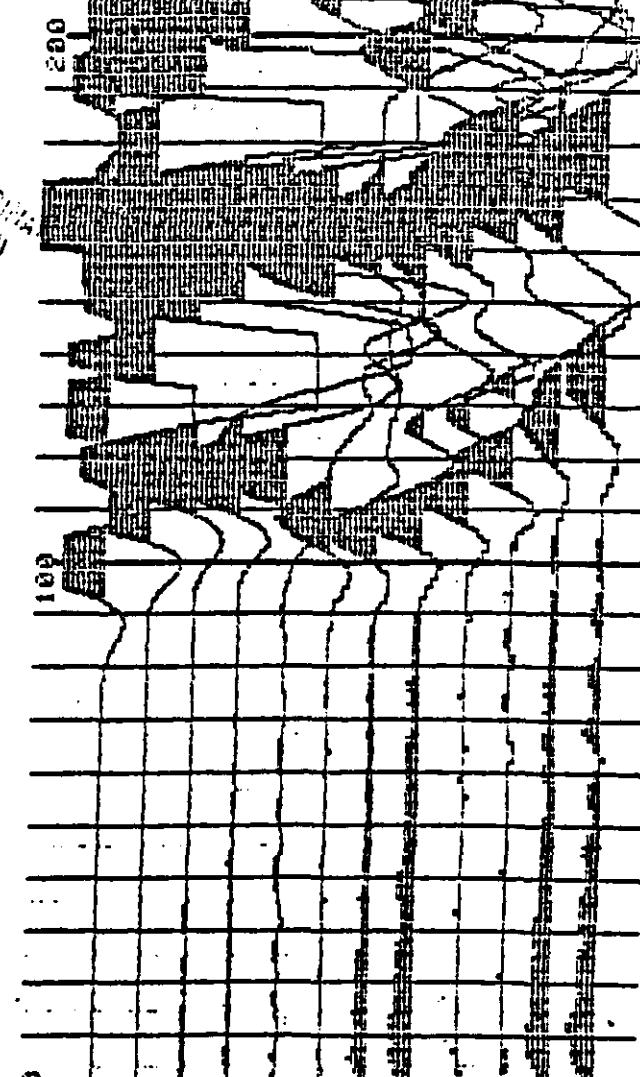
1

10 60 13

11 60 16

12 60 18

FILTER IN



SP-29 LF

DORNEY

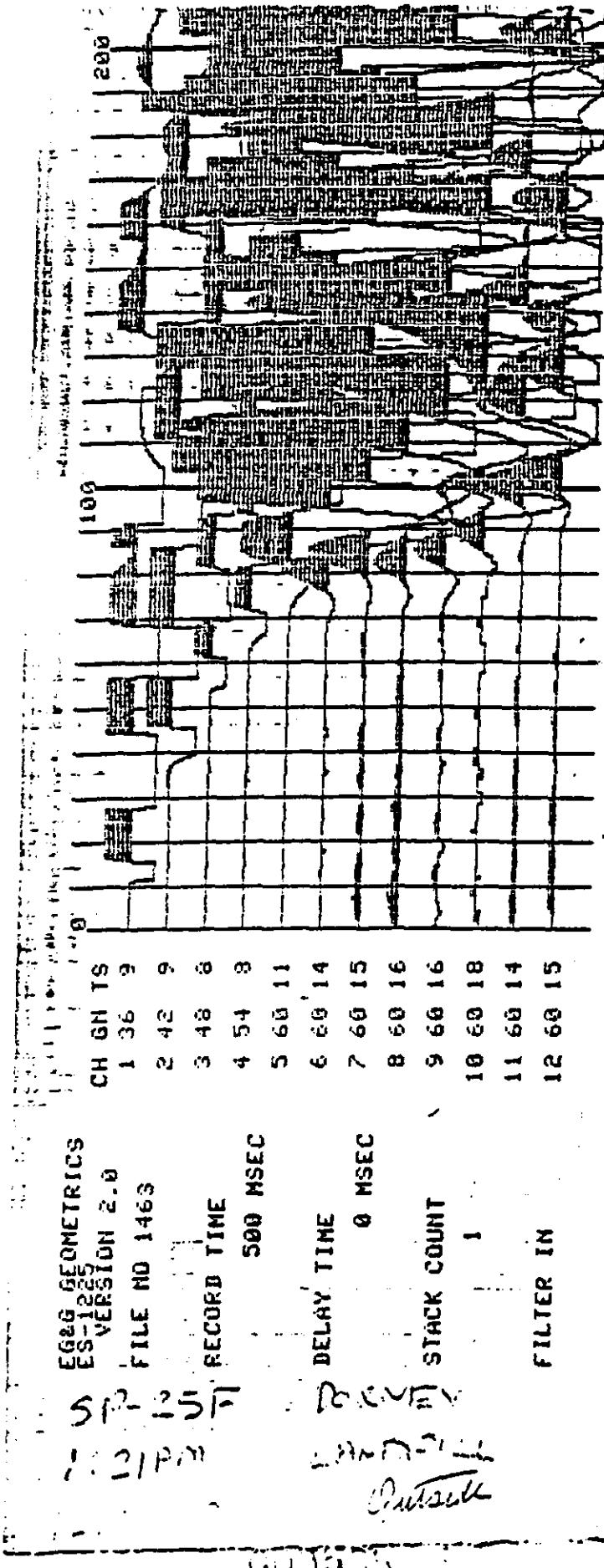
12:53 PM

L1B-D1C

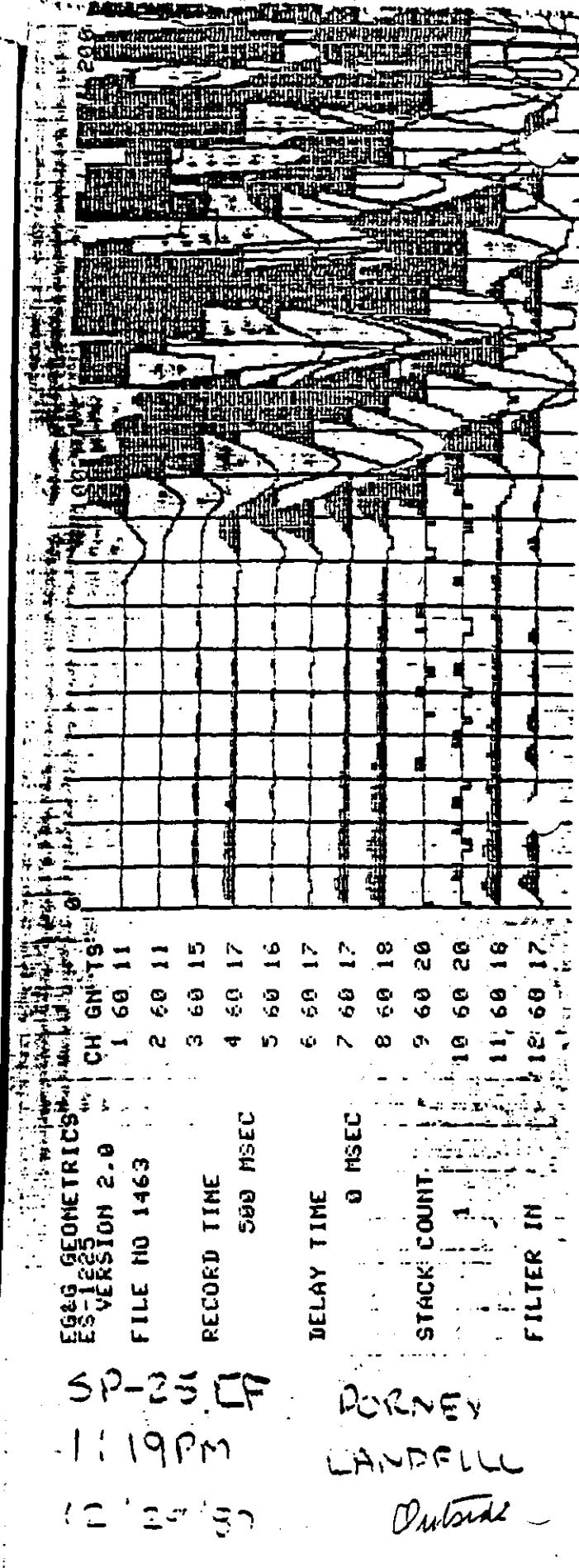
12/22/82

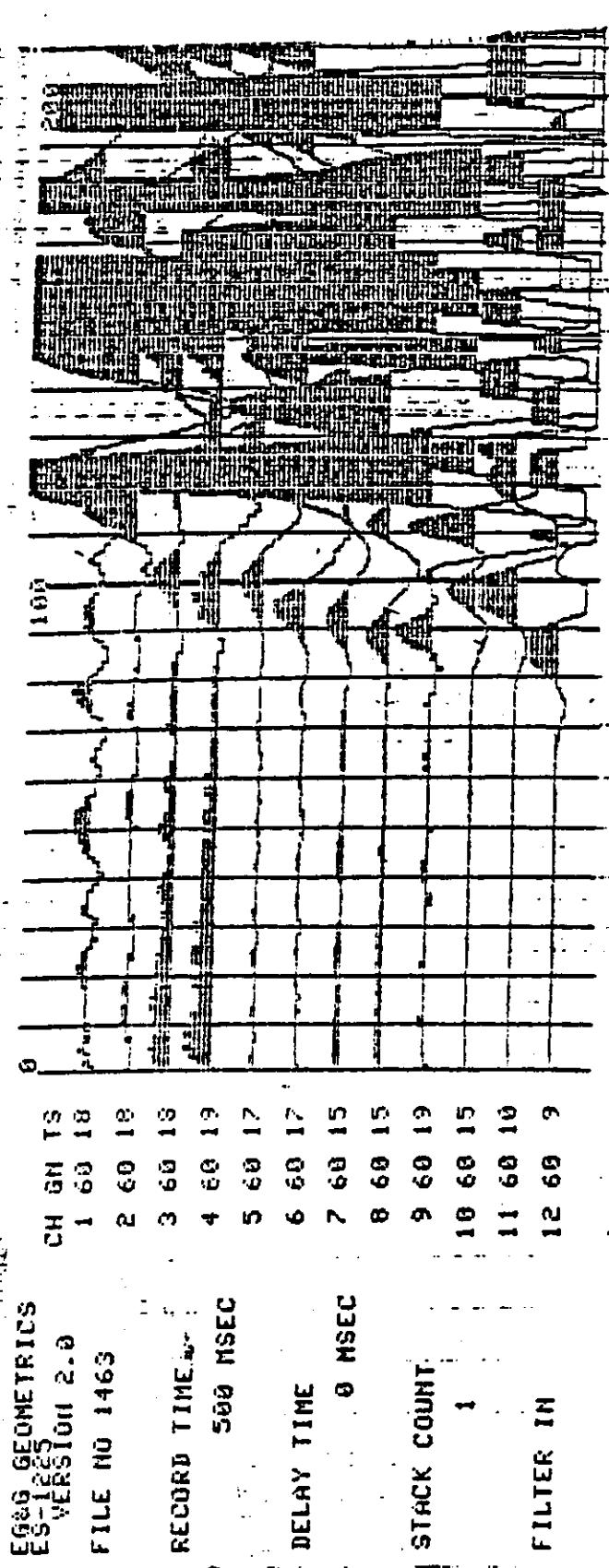
Outside

600538

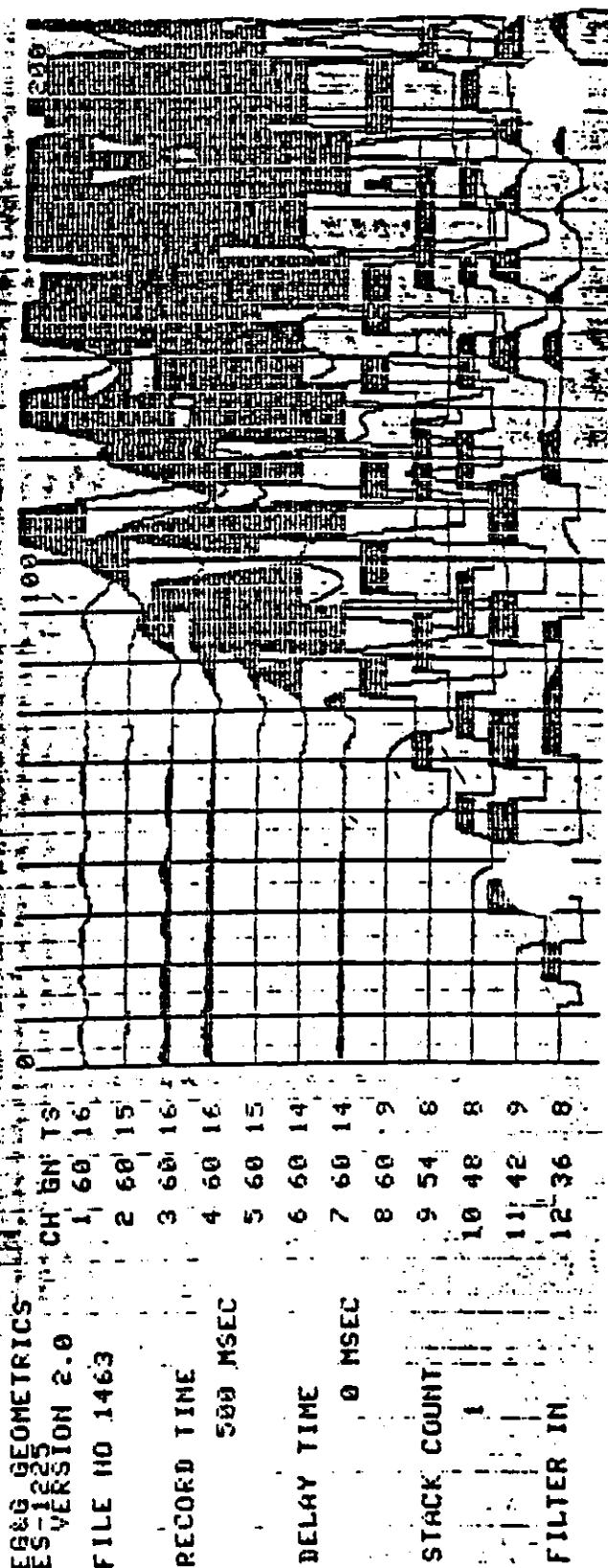


AR000569





100
0 MSEC
FILE NO 1463
RECORD TIME 500 MSEC
DELAY TIME 0 MSEC
STACK COUNT 1
FILTER IN
DOLNEY
LANDFILL
AR000570



100
0 MSEC
FILE NO 1463
RECORD TIME 500 MSEC
DELAY TIME 0 MSEC
STACK COUNT 1
FILTER IN
DOLNEY
LANDFILL
Outside
AR000570

ESEG GEOMETRICS
ES-VERSION 2.0
FILE NO 1463
RECORD TIME 0 MSEC
500 MSEC
DELAY TIME 0 MSEC

STACK COUNT 1
10 60 18
11 60 18
12 60 17
FILTER IN

SP-2G LF

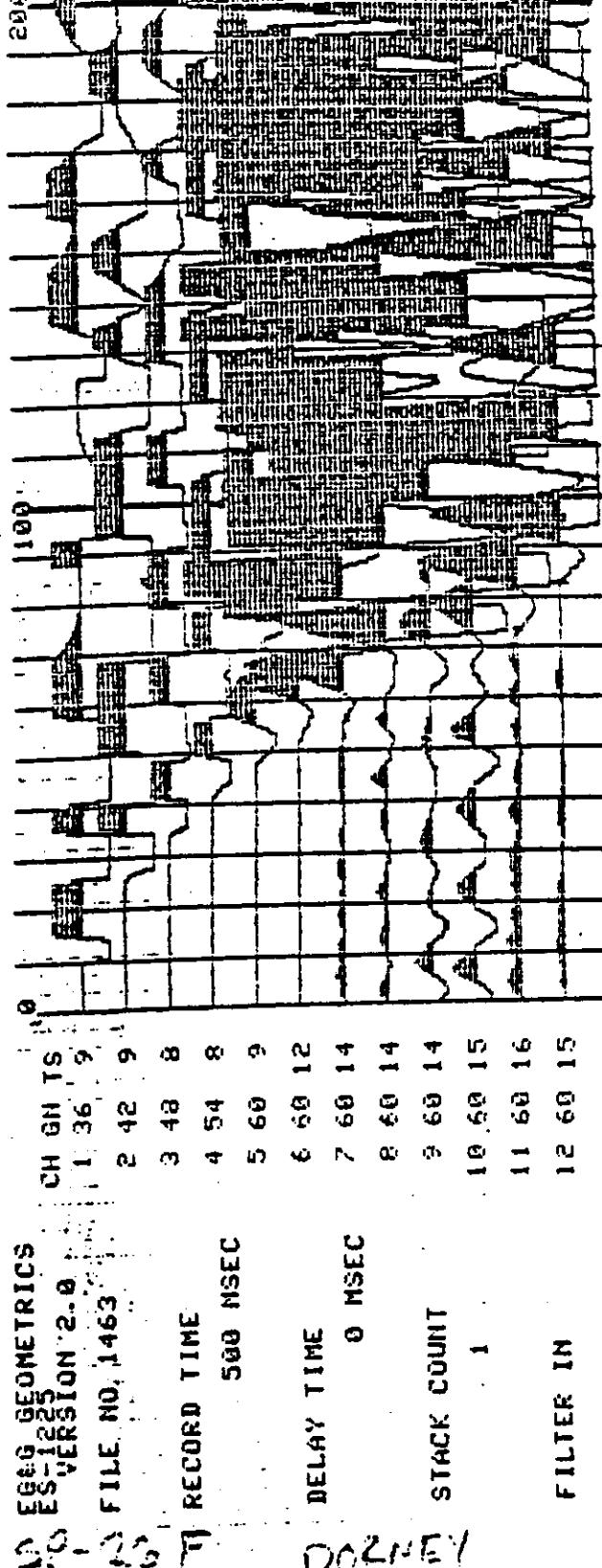
:47 PM

12/29/87

DORNEY
LANDS
Overall

000572

AR000571



1:46 PM

12/29/87

EG&G GEOMETRICS

ES-1225
VERSION 2.0

FILE NO 1463

RECORD TIME

500 MSEC

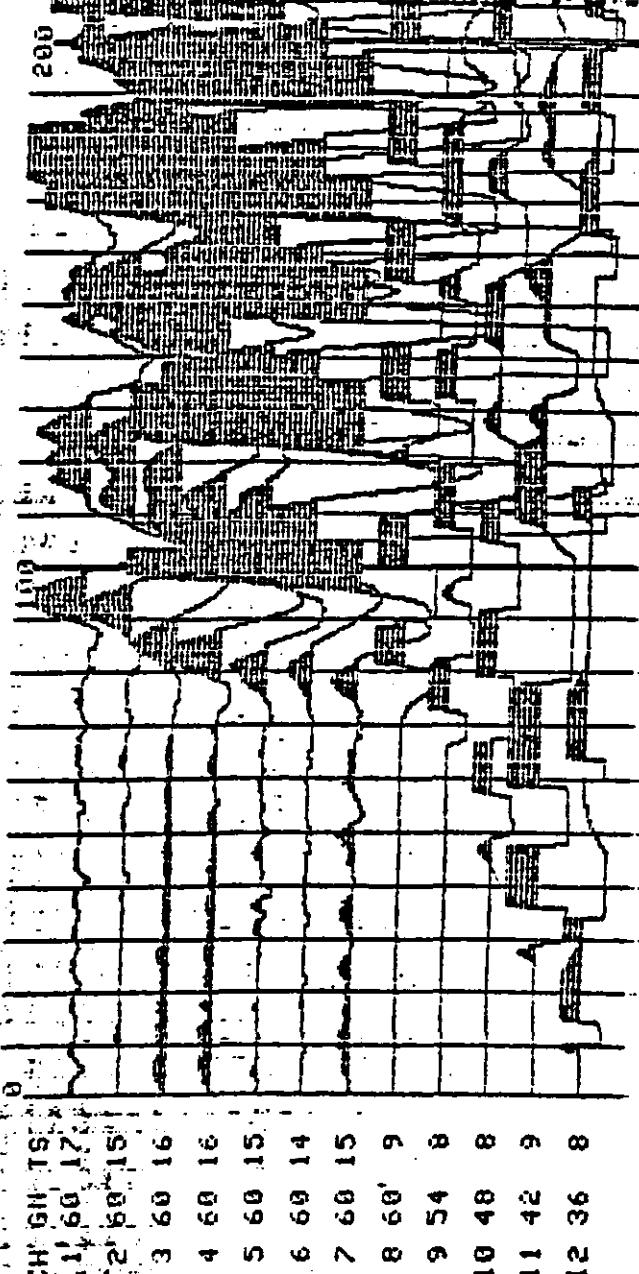
DELAY TIME

0 MSEC

STACK COUNT

1

FILTER IN



SP-26 R

Dormant

1:40 PM

LANDFIL

Outside

12/29/87

AR000572

EG&G GEOMETRICS

ES-1225
VERSION 2.0

FILE NO 1463

RECORD TIME

500 MSEC

DELAY TIME

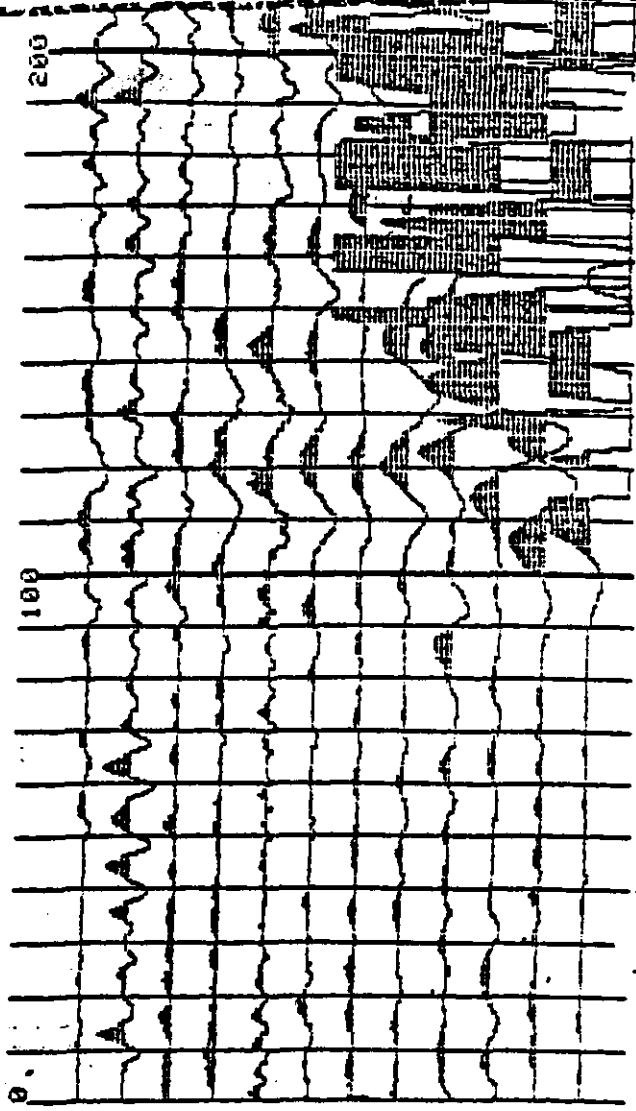
0 MSEC

STACK COUNT

1

FILTER IN

12 60 10



SP-26 LR

1:37 PM

12/29/87

Dormant

LANDFIL

Outside

000572

EG&G GEOMETRICS
VERSION 2.0

FILE NO 1463

RECORD TIME

500 MSEC

DELAY TIME

0 MSEC

STACK COUNT

1

FILTER IN

SP-27F

2:07 PM

12/29/87

000073

DORNEY

LANDFILL

Outside

EG&G GEOMETRICS

VERSION 2.0

FILE NO 1463

RECORD TIME

500 MSEC

DELAY TIME

0 MSEC

STACK COUNT

1

FILTER IN

SP-27 LF

2:10 PM

12/29/87

DORNEY

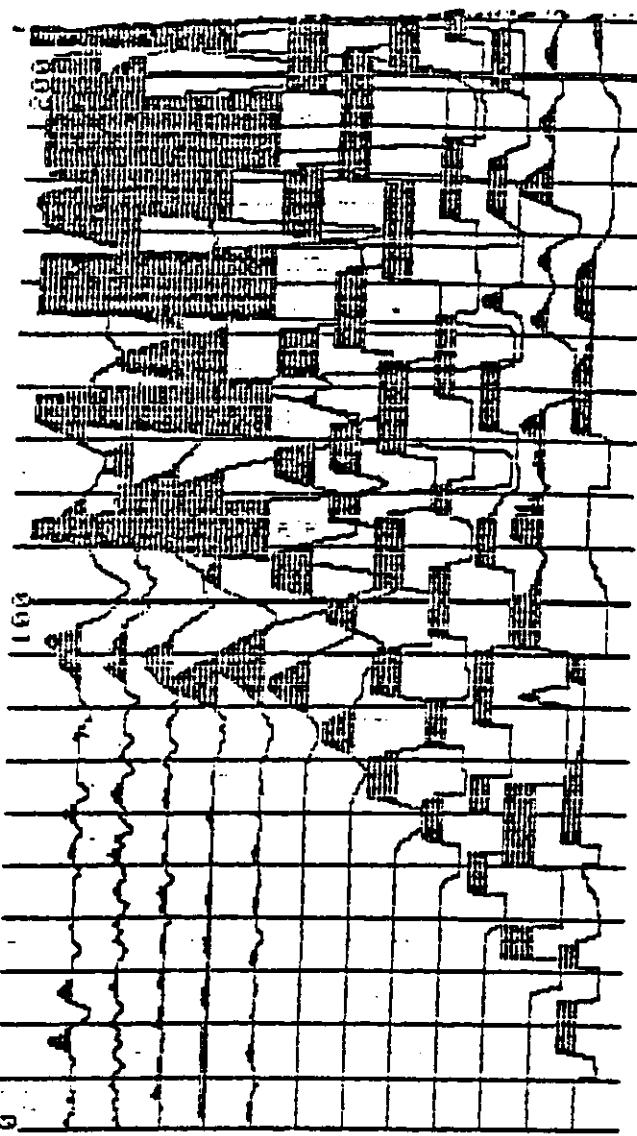
LANDFILL

Outside

AR000573

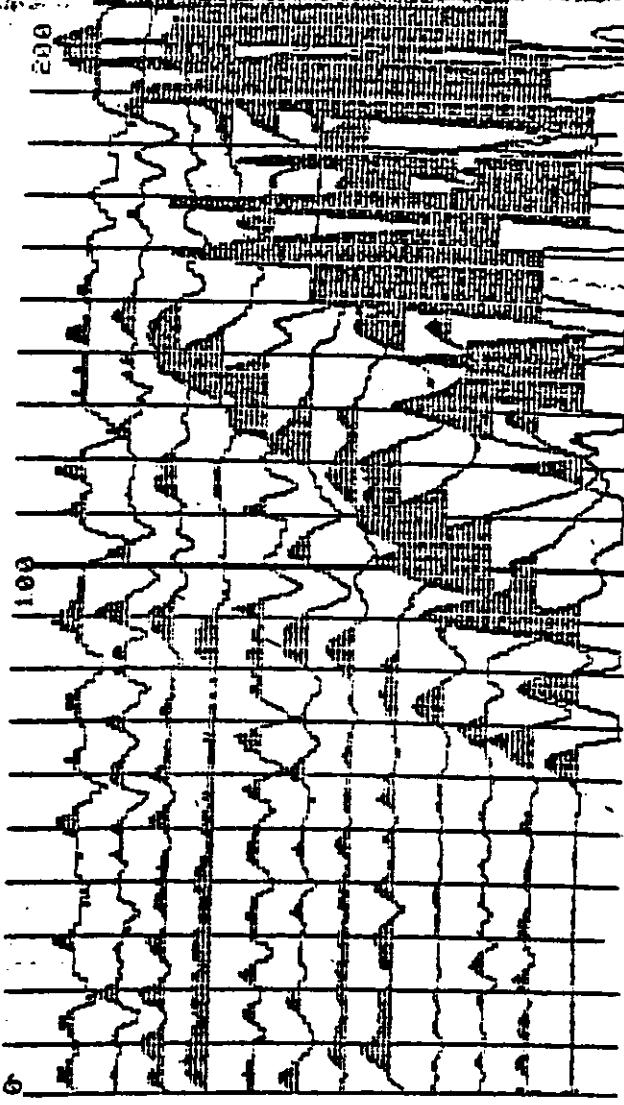
EGG GEOMETRICS
 EGG-VERSION 2.0
 FILE NO 1463
 RECORD TIME 3:00 PM
 500 MSEC
 DELAY TIME 0 MSEC
 STACK COUNT 1
 FILTER IN

SP-27 R
 DORNEY
 LND OFFICE
 12/27/87
 Outside



EGG GEOMETRICS
 EGG-VERSION 2.0
 FILE NO 1463
 RECORD TIME 3:02 PM
 500 MSEC
 DELAY TIME 0 MSEC
 STACK COUNT 1
 FILTER IN

SP-27 LR
 2:02 PM
 12/27/87
 DORNEY
 LND OFFICE
 Outside



AR000574

CD0574

Field Data

Inside Landfill

000575

AR000575

EG&G GEOMETRICS 2.0
 VERSION 2.0
 FILE NO. 1463
 RECORD TIME 0.500 MSEC
 DELAY TIME 0 MSEC
 STACK COUNT 1
 FILTER IN 16/12

Log file 5/12/4-07

desire

AR006576

EG&G GEOMETRICS 2.0
 VERSION 2.0
 FILE NO. 1463
 RECORD TIME 0.500 MSEC
 DELAY TIME 0 MSEC
 STACK COUNT 1
 FILTER IN 16/12

Log file 5/12/4-07
SPLR desire

000575

E&G GEOMETRICS
ES-1255
VERSION 2.0

FILE NO. 1463

RECORD TIME

500 MSEC

DELAY TIME

0 MSEC

STACK COUNT

1

FILTER IN

Jaselle

CH GN TS
1 60 8
2 60 10
3 60 14
4 60 15
5 60 16
6 60 16
7 60 17
8 60 17
9 60 16
10 60 17
11 60 17
12 60 17

Labeled by LF 1-4-77

000577

E&G GEOMETRICS
ES-1255
VERSION 2.0

FILE NO. 1463

RECORD TIME

500 MSEC

DELAY TIME

0 MSEC

STACK COUNT

1

FILTER IN

Jaselle
11 60 14
12 60 15

AR000577

EG&G GEOMETRICS
ES-1265
VERSION 2.0
FILE NO. 1463

RECORD TIME
500 MSEC

DELAY TIME
0 MSEC

STACK COUNT
1

FILTER IN

DOPNEY LANDFILL

11/5/88

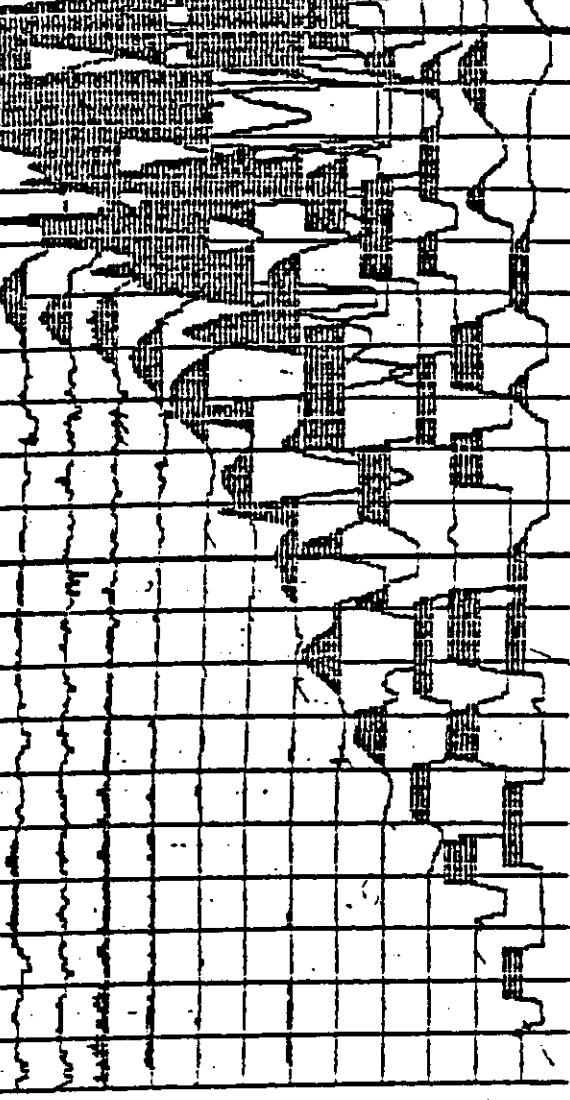
10:47 AM '88

Jessie

SP-2 R

AR000578

100
0



EG&G GEOMETRICS
ES-1265
VERSION 2.0
FILE NO. 1463

RECORD TIME
500 MSEC

DELAY TIME
0 MSEC

STACK COUNT
1

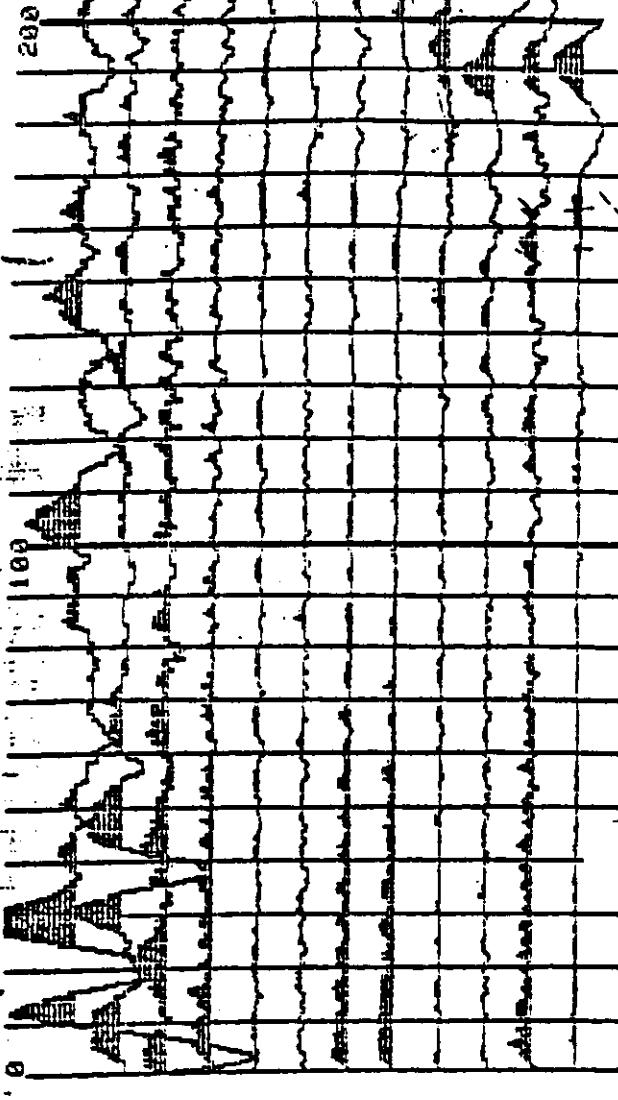
FILTER IN

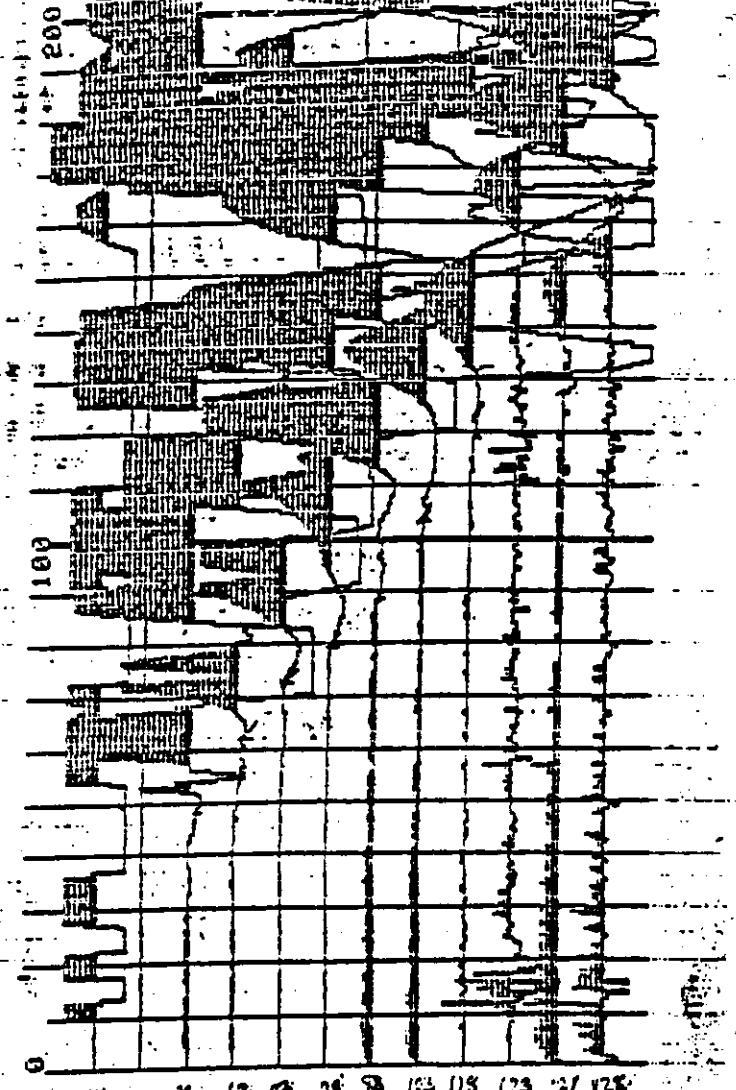
DOPNEY LANDFILL

11/5/88

10:51 AM

Jessie
AR000578





EGG GEOMETRICS
 VERSION 2.0
 FILE NO. 1463
 RECORD TIME 3.48-13.8
 DELAY TIME 4.54-13.7
 5.60-12.3
 6.60-13.2
 7.60-16.9
 8.60-16.5
 9.60-16.3
 10.60-16.0
 11.60-18.3
 12.60-17.5
 FILTER IN

DORNEY LANDFILL

SP 2F

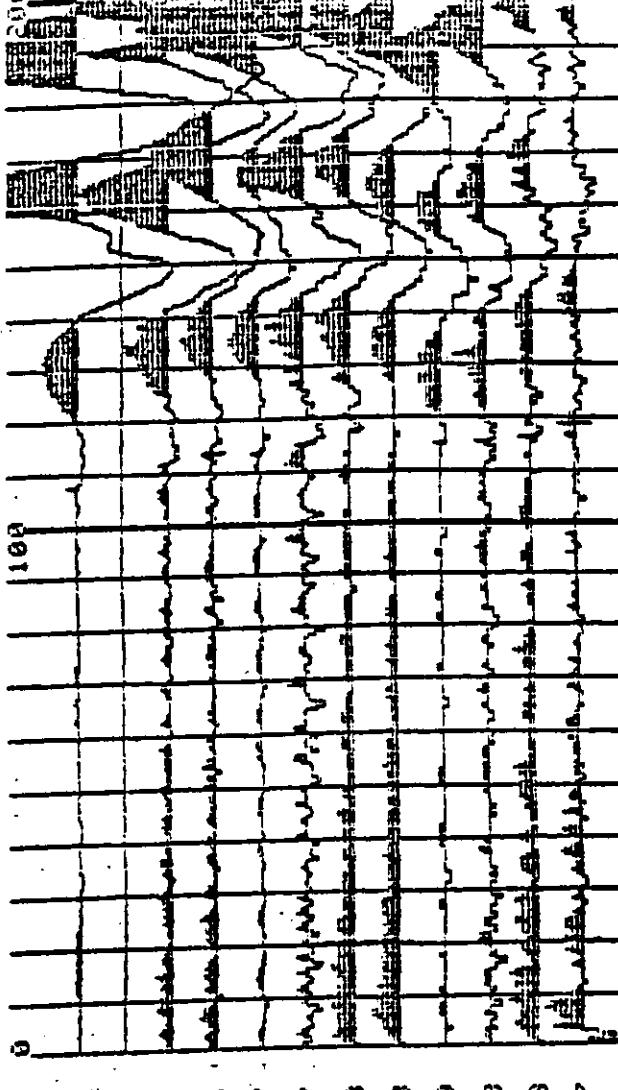
11/5/88

Insole

10:43 AM

000579

AR000579



EGG GEOMETRICS
 VERSION 2.0
 FILE NO. 1463
 RECORD TIME 3.48-13.8
 DELAY TIME 4.54-13.7
 5.60-12.3
 6.60-13.2
 7.60-16.9
 8.60-16.5
 9.60-16.3
 10.60-16.0
 11.60-18.3
 12.60-17.5
 FILTER IN

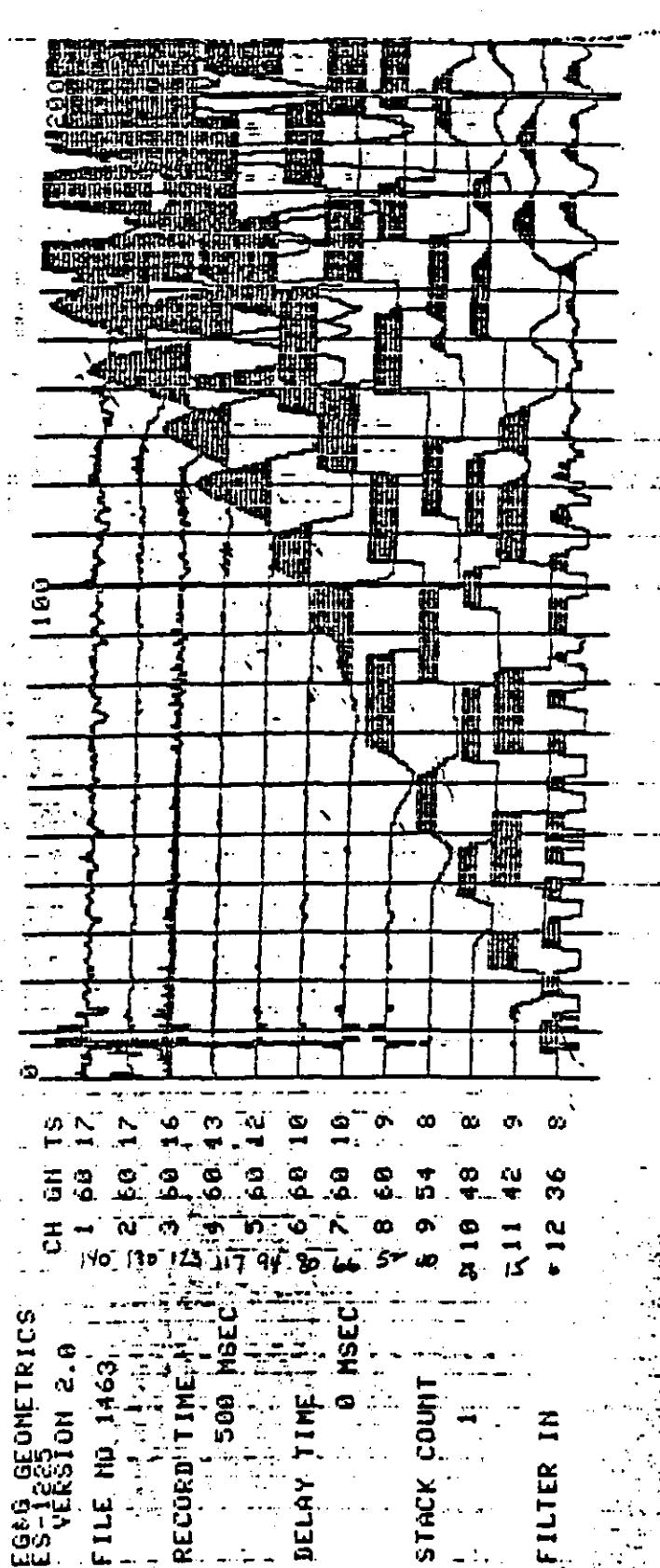
DORNEY LANDFILL

SP - 2LF

11/5/88

Insole

10:35 AM



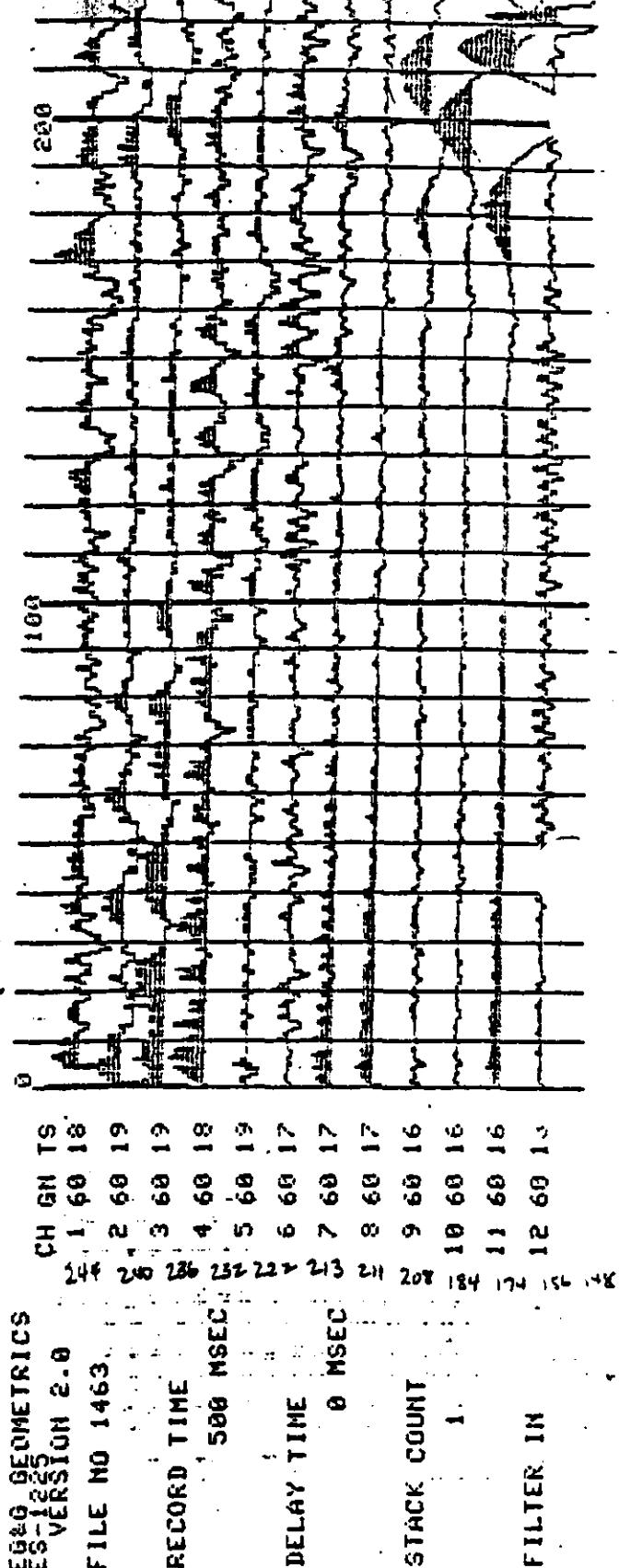
DORNEY LANDFILL SP-3R

11/15/88

11:17 AM

initial

AR000580



DORNEY LANDFILL

11/15/88

11:21 AM

initial

000580

Egg Geometrics

EST-125 VERSION 2.0

FILE NO 1463

RECORD TIME

500 MSEC

DELAY TIME

0 MSEC

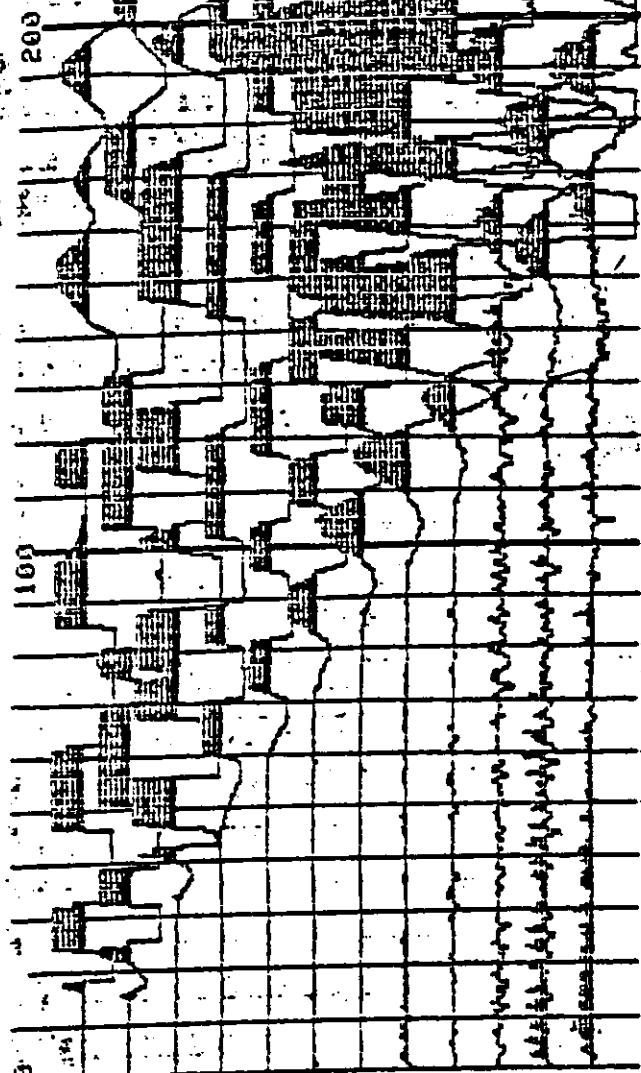
STACK COUNT

1

FILTER IN

DORNEY LANDFILL SP-3P
1/5/88

11:17 AM Inside



CH GN TS

1 36 9

2 42 9

3 48 10

4 54 8

5 60 6

6 60 9

7 60 10

8 60 13

9 60 15

10 60 14

11 60 16

12 60 17

132

Egg Geometrics

EST-125 VERSION 2.0

FILE NO 1463

RECORD TIME

500 MSEC

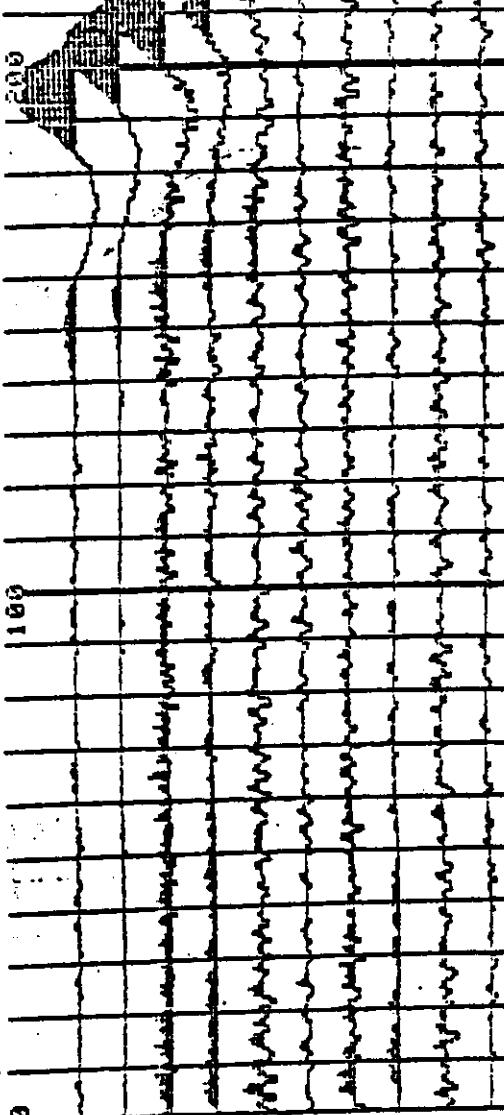
DELAY TIME

0 MSEC

STACK COUNT

1

FILTER IN



CH GN TS

1 60 14

2 60 14

3 60 16

4 60 16

5 60 16

6 60 13

7 60 14

8 60 15

9 60 15

10 60 15

11 60 15

12 60 16

236

DORNEY LANDFILL SP-3P

1/5/88 Inside

10:11 AM Inside

AR000581

E&G GEOMETRICS
ES-125
VERSION 2.0

FILE NO 1463 CH GH TS

38 1 60 16

139 2 60 18

124 3 60 15

117 4 60 14

88 5 60 14

70 6 60 12

67 7 60 9

59 8 60 9

51 9 54 8

48 10 48 8

41 11 42 9

34 12 36 8

RECORD TIME 0 MSEC

STACK COUNT

t₁₈

t₁₈ t₁₈

FILTER IN d₅₂

DORNEY LANDFILL SP-4 R

11/7/88

10:37 AM

Inside

E&G GEOMETRICS
ES-125
VERSION 2.0

FILE NO 1463 CH GH TS

1 60 20

2 60 19

3 60 19

4 60 17

5 60 16

6 60 18

7 60 18

8 60 18

9 60 17

10 60 18

11 60 18

12 60 17

RECORD TIME 0 MSEC

STACK COUNT

FILTER OUT

DORNEY LANDFILL SP-4 R

11/7/88

10:45 AM

Front

AR000582

000582

E&G GEOMETRICS

ES-1285
VERSION 2.0

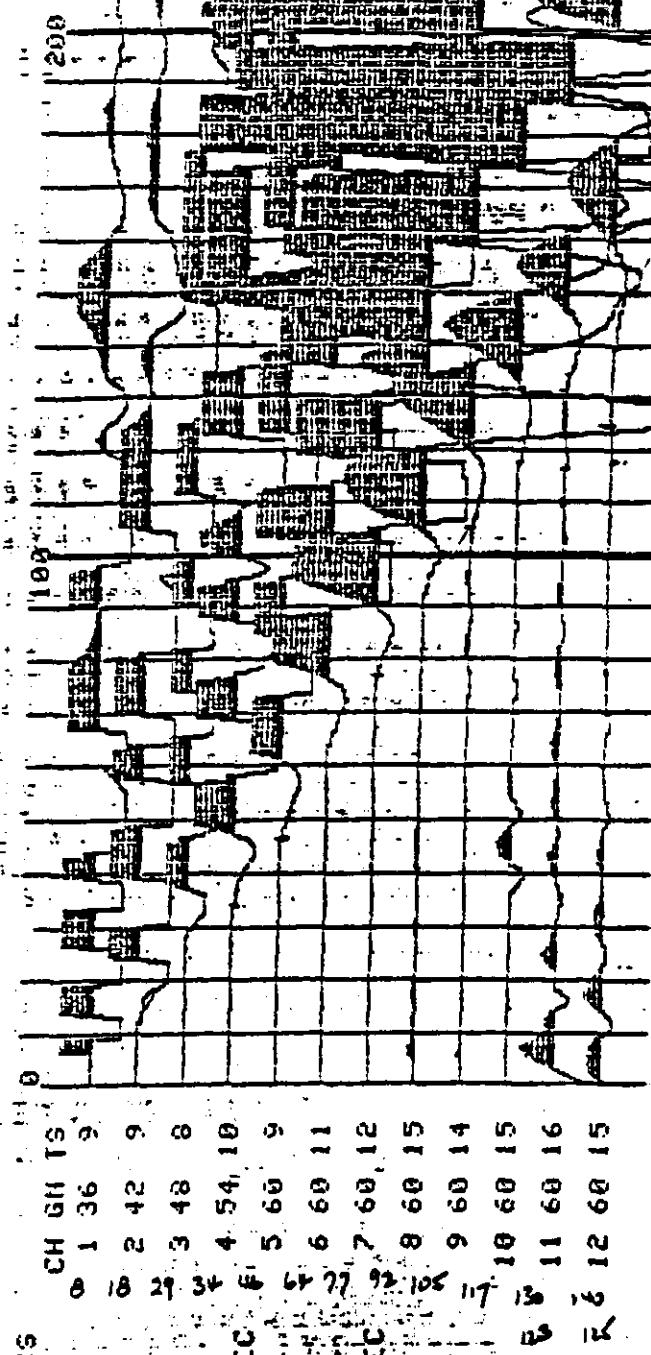
FILE NO 1463

DORNEY LANDFILL SP-4

1/7/88 10:34AM

Inside

000583



RECORD TIME

500 MSEC

DELAY TIME

0 MSEC

STACK COUNT

9

CH GN TS

0 1 36 9

1 2 42 9

2 3 48 8

3 4 54 10

4 5 60 9

5 6 66 9

6 7 72 11

7 8 78 12

8 9 84 15

9 10 90 14

10 11 96 15

11 12 102 16

12 13 108 15

13 14 114 15

14 15 120 15

15 16 126 15

16 17 132 15

17 18 138 15

18 19 144 15

19 20 150 15

20 21 156 15

21 22 162 15

22 23 168 15

23 24 174 15

E&G GEOMETRICS

ES-1285
VERSION 2.0

FILE NO 1463

RECORD TIME

500 MSEC

DELAY TIME

0 MSEC

STACK COUNT

1

2

3

4

5

6

7

8

10:34 1/7/88

10:34 1/7/88

DORNEY LANDFILL
1/7/88 X-200

AR000583

EGG GEOMETRICS

EST-1225
VERSION 2.0

SP FILE NO 1463

RECORD TIME

500 MSEC

DELAY TIME

0 MSEC

STACK COUNT

1

FILTER OUT

12 36 8

SP-5R

DORNEY GANFILE

11:06AM

1/7/83

Jessie

CH GN TS
1 60 16
2 60 13
3 60 12
4 60 11
5 60 9
6 60 8
7 60 8
8 60 8
9 54 8
10 48 8
11 42 9
12 36 8

EGG GEOMETRICS

EST-1225
VERSION 2.0

SP FILE NO 1463

RECORD TIME

1600 MSEC

DELAY TIME

0 MSEC

STACK COUNT

1

FILTER OUT

19 50 18
21 60 18
12 60 17

SP-5 LR

1/7/83

DORNEY GANFILE

108 AM

changed rec length
on long shots

Jessie

AR000584

000584

E&G GEOMETRICS
ES-1255 VERSION 2.0

FILE NO 1463

RECORD TIME

500 MSEC

DELAY TIME

0 MSEC

STACK COUNT

1

FILTER OUT

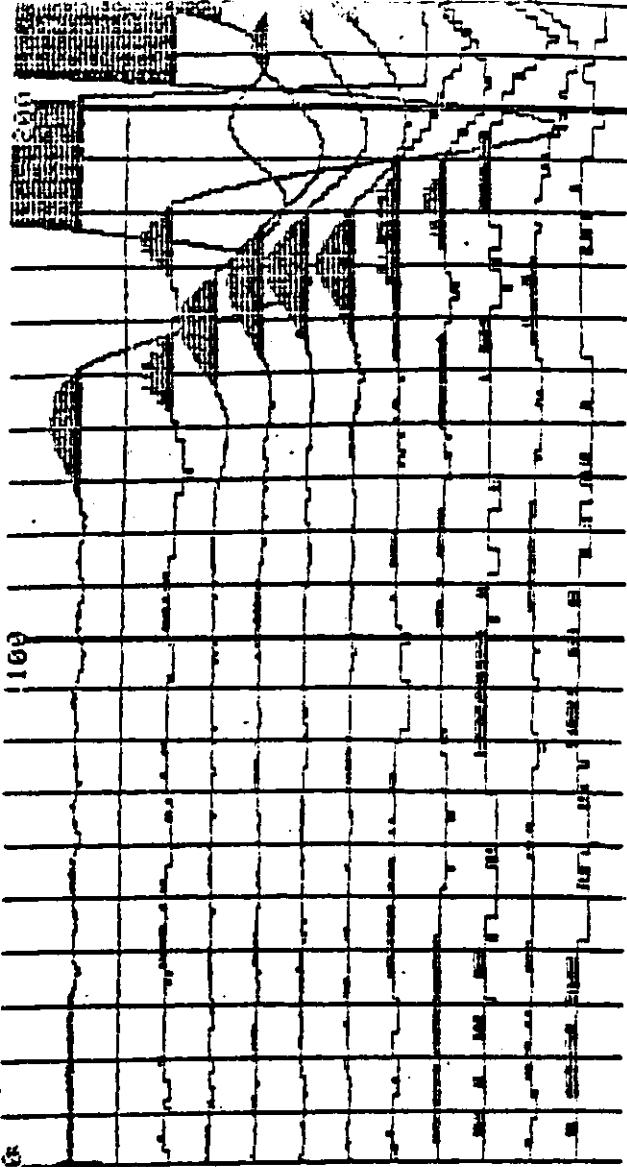
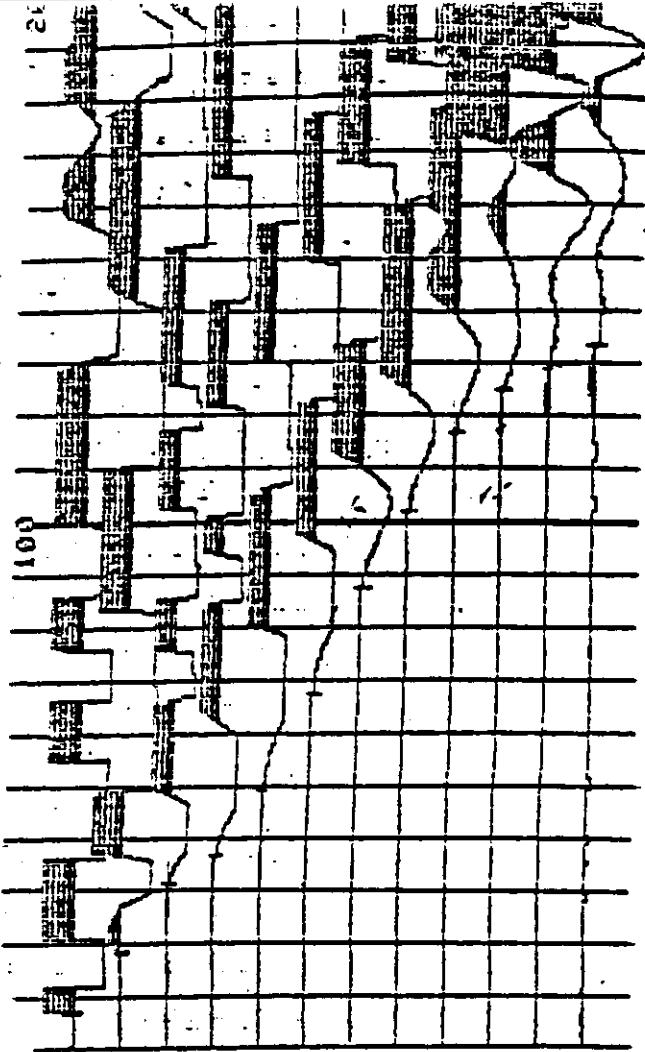
5

SP-SF DORNEY LANDFILL

11:02AM 1/7/87

Profile

000535



E&G GEOMETRICS
ES-1255 VERSION 2.0

FILE NO 1463

RECORD TIME

500 MSEC

DELAY TIME

0 MSEC

STACK COUNT

1

FILTER OUT

DORNEY LANDFILL

10:58AM 1/7/87

Profile

AR000585

EGG GEOMETRICS

EST-125 VERSION 2.0

FILE NO 1463

RECORD TIME

500 MSEC

TIME

6 60 3 8

DELAY TIME

8 MSEC

TIME

7 60 2 8

STACK COUNT

8 60 5 8

TIME

9 54 4 8

STACK COUNT

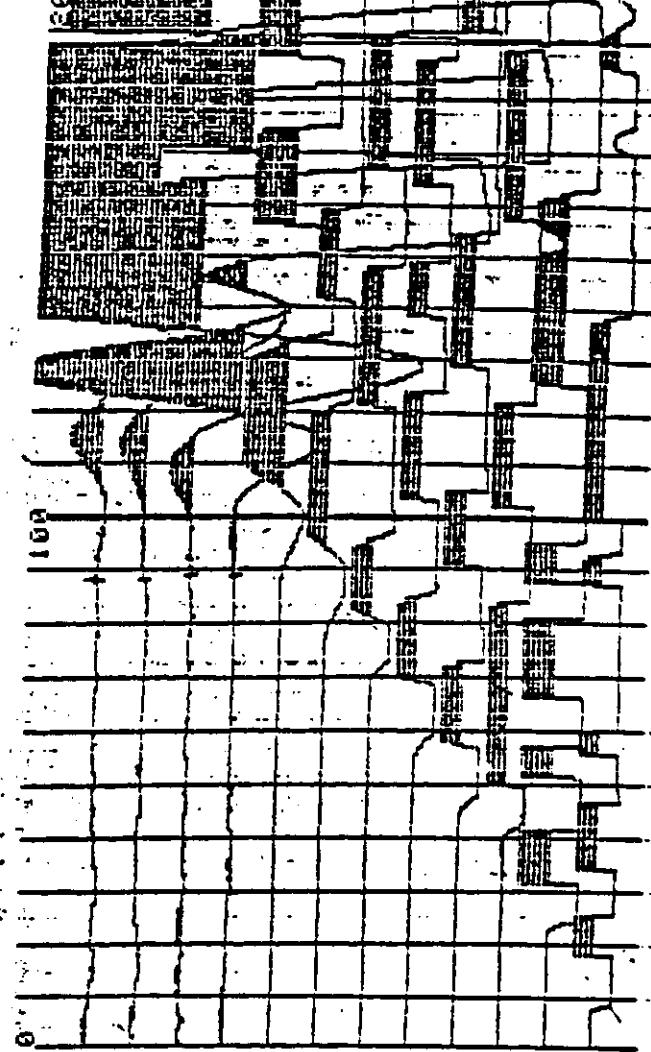
10 48 3 8

TIME

11 42 2 9

FILTER OUT

12 36 0 8



EGG GEOMETRICS

EST-125 VERSION 2.0

FILE NO 1463

RECORD TIME

1000 MSEC

TIME

1 60 17

DELAY TIME

0 MSEC

TIME

2 60 16

STACK COUNT

3 60 18

TIME

4 60 17

DELAY TIME

103 72 17

STACK COUNT

5 60 18

TIME

104 90 18

DELAY TIME

0 MSEC

TIME

6 60 16

STACK COUNT

7 60 17

TIME

8 60 15

DELAY TIME

1 MSEC

TIME

9 60 16

STACK COUNT

10 60 15

TIME

11 60 14

DELAY TIME

2 MSEC

TIME

12 60 14

DELAY TIME

3 MSEC

TIME

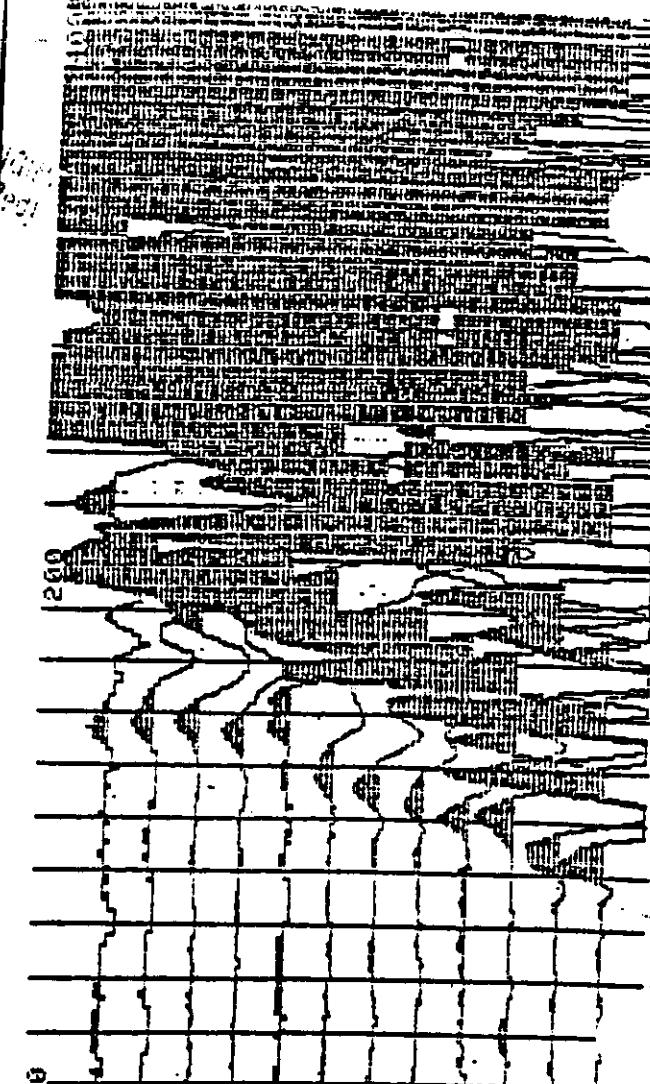
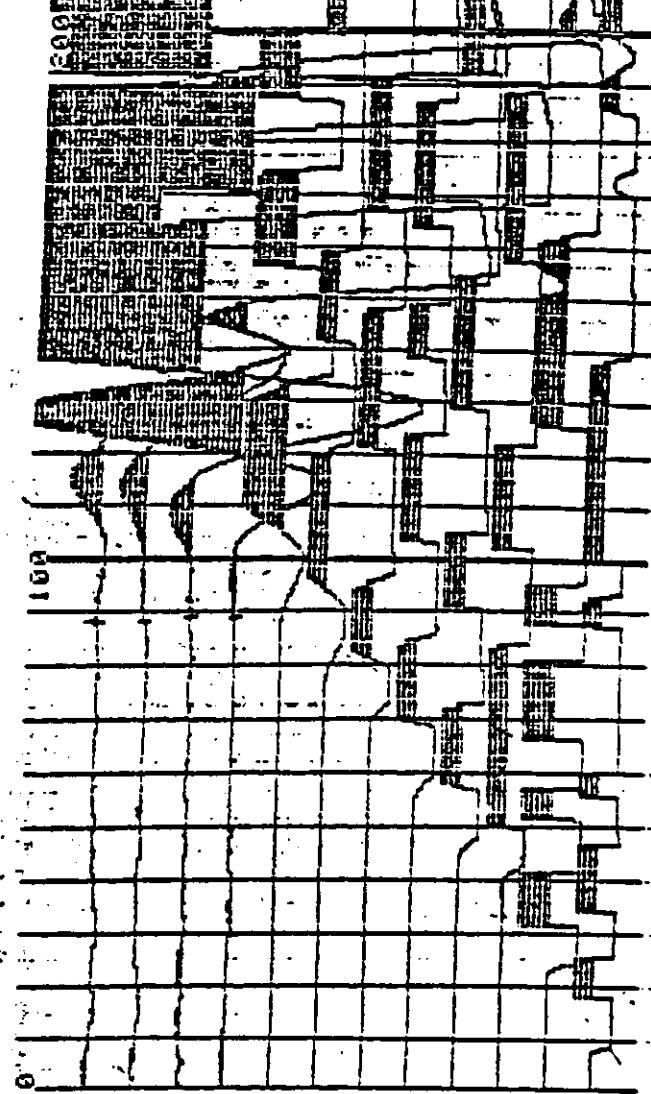
13 60 14

DELAY TIME

4 MSEC

TIME

14 60 14



DARNEY LANDFILL

SP-6 R 11125 AM

1/7/88

Josie

DORN

202

SP-6

LP

11:30AM

1/7/88

Josie

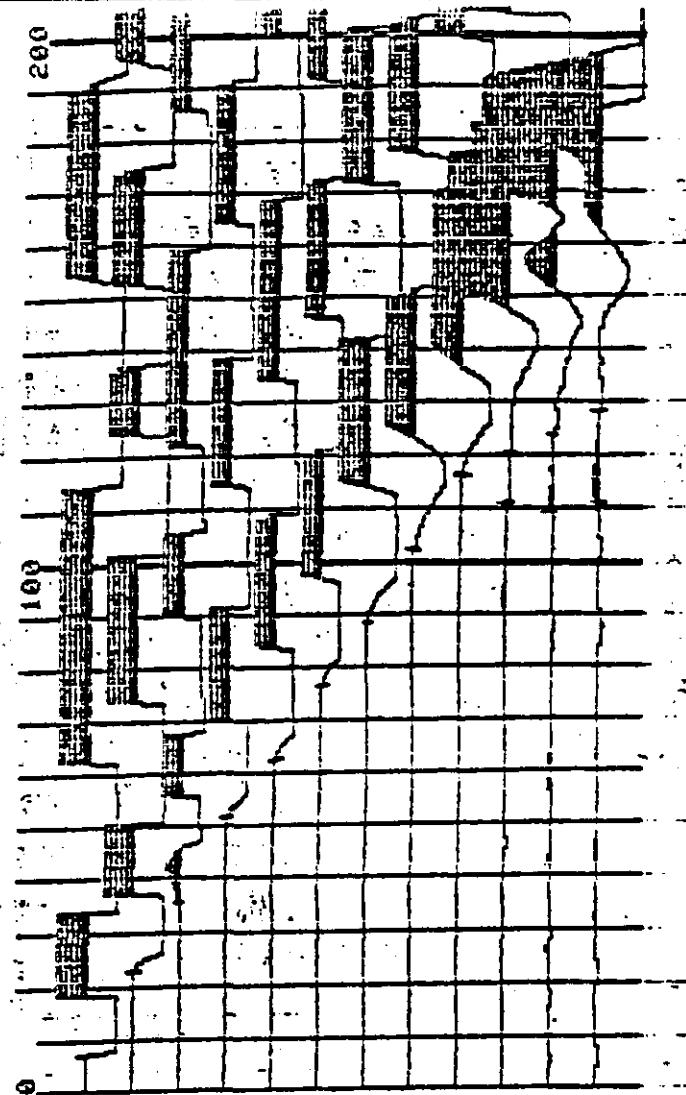
AR000586

000586

EGEG GEOMETRICS
 EST-1225 VERSION 2.0
 FILE NO 1463
 RECORD TIME 500 MSEC
 DELAY TIME 0 MSEC
 STACK COUNT 1
 FILTER OUT 11

DORNEY LANDFILL SP-G
 1/7/83 11:22 AM

000587



EGEG GEOMETRICS
 EST-1225 VERSION 2.0
 FILE NO 1463
 RECORD TIME 1000 MSEC
 DELAY TIME 0 MSEC
 STACK COUNT 1
 FILTER OUT 12

SP-G 11 DORNEY LANDFILL
 11:19 AM 1/7/83

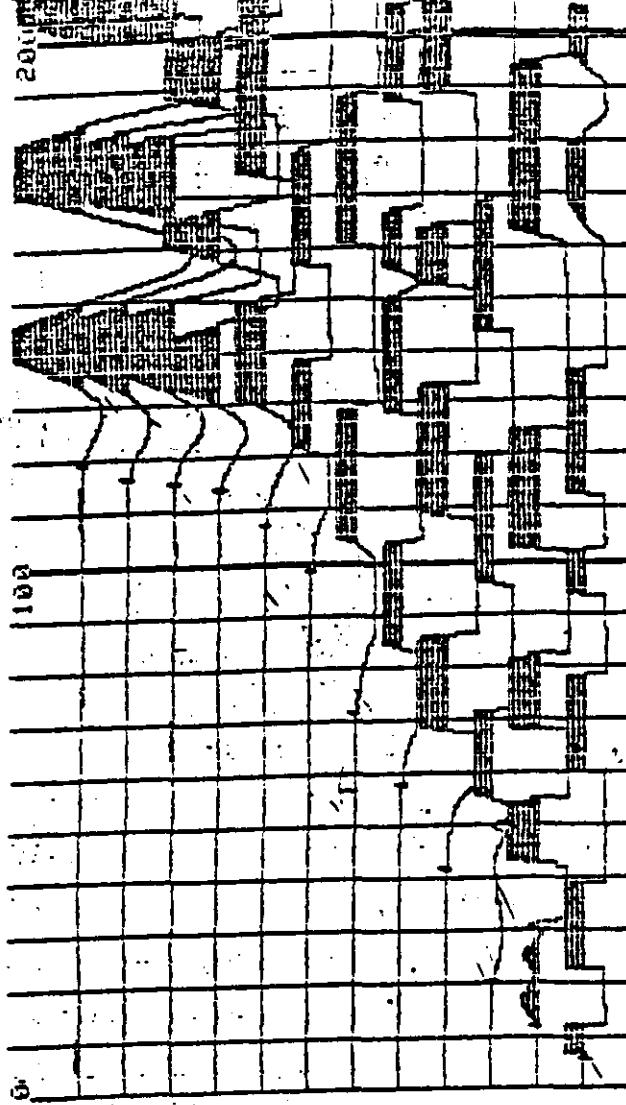
AR000587

E&G GEOMETRICS
ES-1225
VERSION 2.0
FILE NO 1463
RECORD TIME
500 MSEC

DELAY TIME 0 MSEC
STACK COUNT 1
FILTER OUT SP-7R

2:00PM 1/7/88

Janie

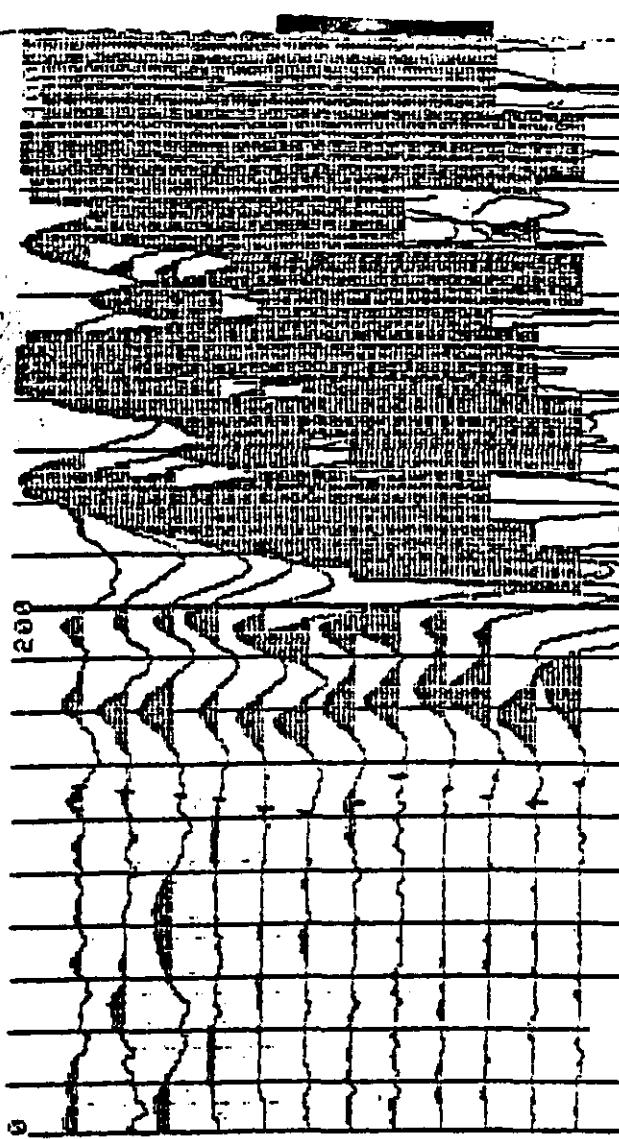


E&G GEOMETRICS

ES-1225
VERSION 2.0
FILE NO 1463
RECORD TIME

1000 MSEC
0 MSEC
STACK COUNT 1

2:00PM 1/7/88
SP-7R Janie



AR000588

CO0588

EEG GEOMETRICS
 EST-1265
 VERSION 2.0
 FILE ID 1463
 RECORD TIME
 1000 MSEC
 DELAY TIME
 0 MSEC
 STACK COUNT
 1
 FILTER OUT
 SP-7 F

DORRIFY LABORATORY
 1:50PM 1/7/88
 Janice

000589

EEG GEOMETRICS
 EST-1265
 VERSION 2.0
 FILE ID 1463
 RECORD TIME
 1000 MSEC
 DELAY TIME
 0 MSEC
 STACK COUNT
 1
 FILTER OUT
 SP-7 F

DORRIFY LABORATORY
 1/7/88 1:45PM

SP-7 F Janice

AR000589

EGG GEOMETRICS

VERSION 2.0 FILE # 1463

RECORD TIME 10:33 PM 1/7/88

DELAY TIME 0 MSEC

STACK COUNT 1

500 MSEC

5 60 10

6 60 8

7 60 11

8 60 10

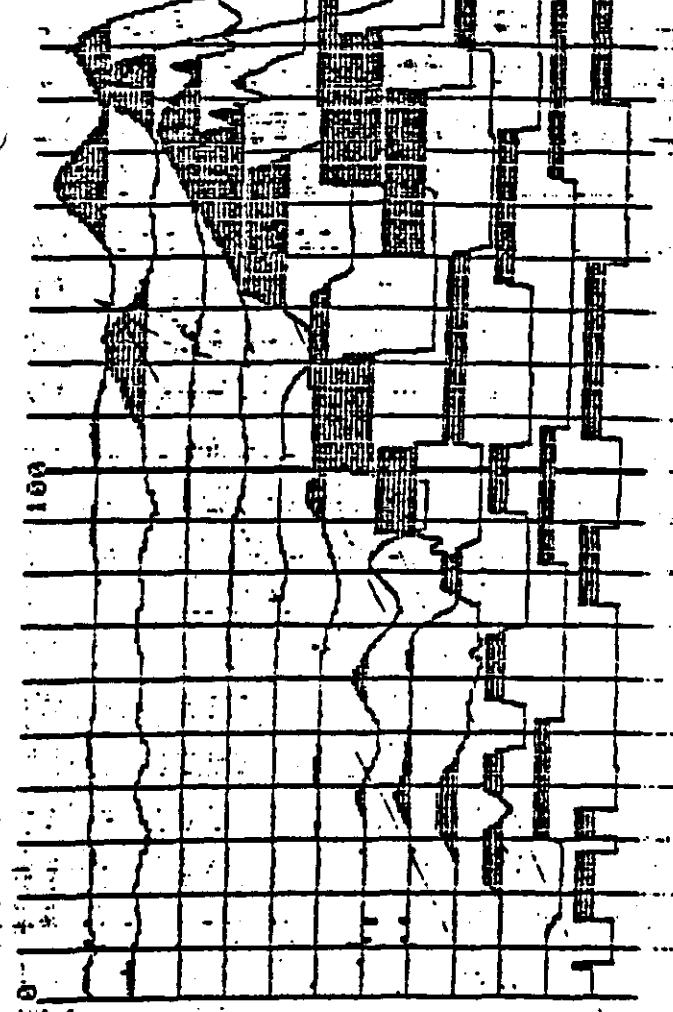
9 54 8

10 48 8

11 42 7

12 36 8

FILTER OUT



DORNEY LANDFILL SP-B R

10:33 PM 1/7/88 Inside

AR000590

EGG GEOMETRICS

VERSION 2.0 FILE # 1463

RECORD TIME 10:37 PM 1/7/88

DELAY TIME 0 MSEC

STACK COUNT 1

5 60 16

6 60 15

7 60 14

8 60 13

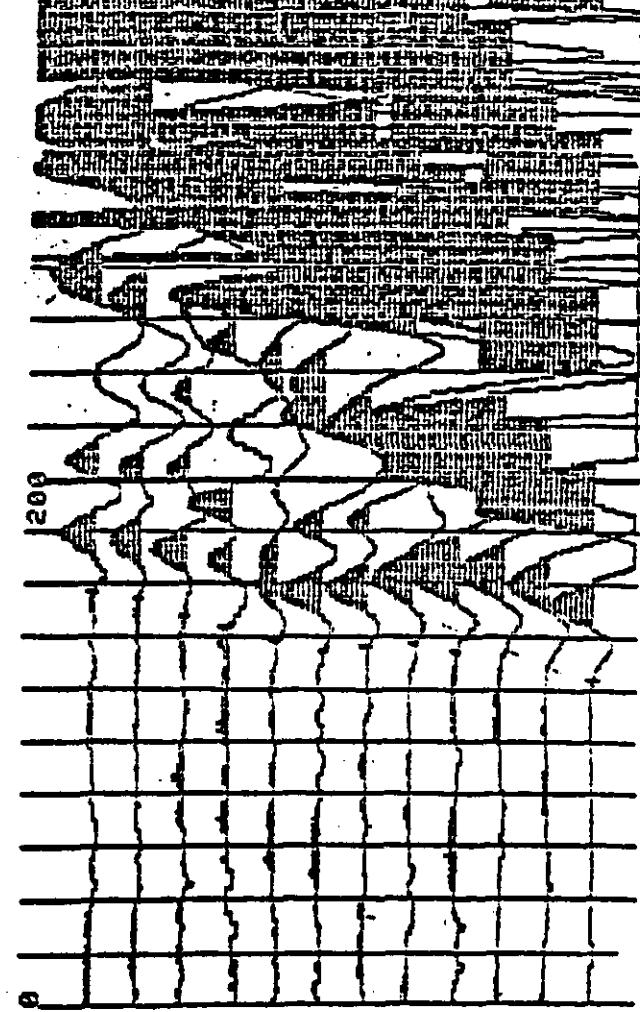
9 60 12

10 60 11

11 60 10

12 60 9

FILTER OUT



DORNEY LANDFILL SP-B R
10:37 PM 1/7/88 Inside

000590

E&G GEOMETRICS

ES-1225
VERSION 2.0

FILE NO 1463

RECORD TIME

500 MSEC

DELAY TIME

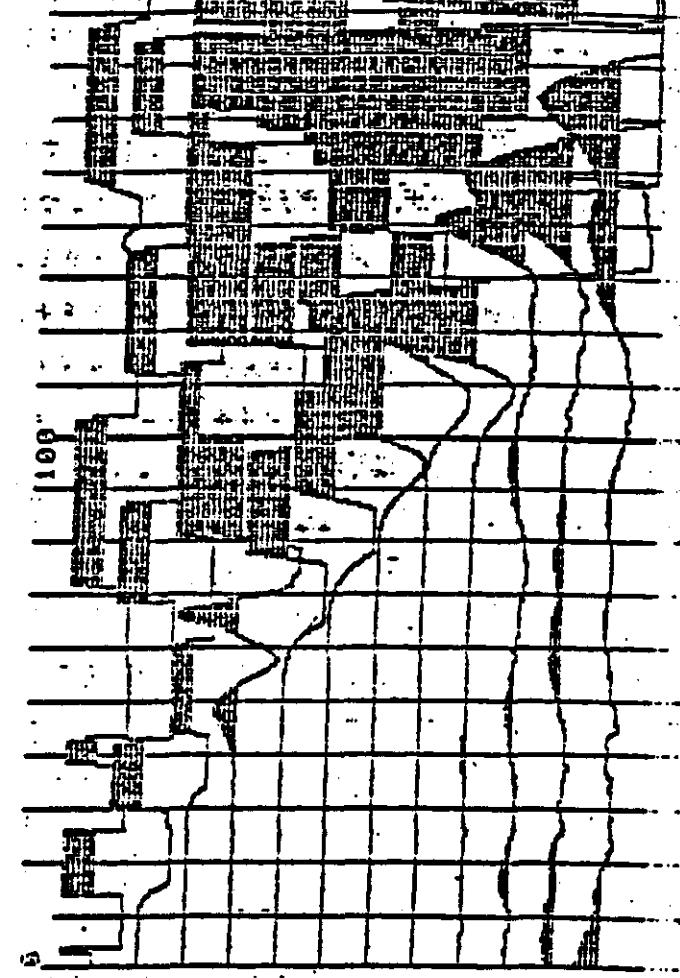
0 MSEC

STACK COUNT

1

FILTER OUT

12 60 16



SP-13F

DORNEY LANDFILL

2:22 PM 1/8/88

Jasmin

CC00891

E&G GEOMETRICS

ES-1225
VERSION 2.0

FILE NO 1463

RECORD TIME

500 MSEC

DELAY TIME

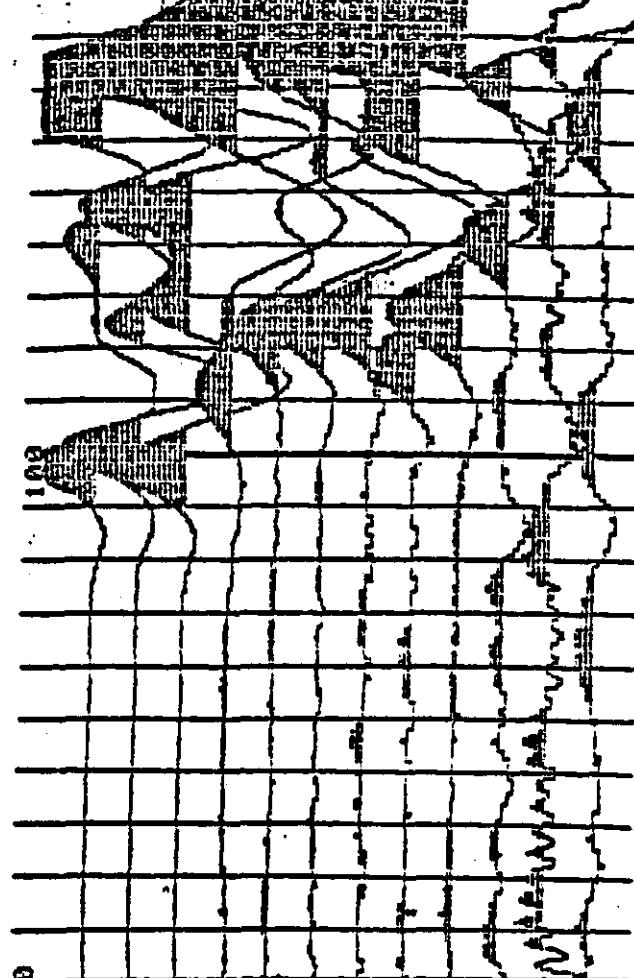
0 MSEC

STACK COUNT

1

FILTER OUT

12 60 16



SP-13

DORNEY LANDFILL

2:19 PM 1/8/88

Jasmin

AR000591

DORNEY LANDFILL
SP-9 LR

2:50 PM 1/7/83 J male

EG&G GEOMETRICS

EST-125
VERSION 2.0
FILE NO 1463

RECORD TIME

1000 MSEC

DELAY TIME

0 MSEC

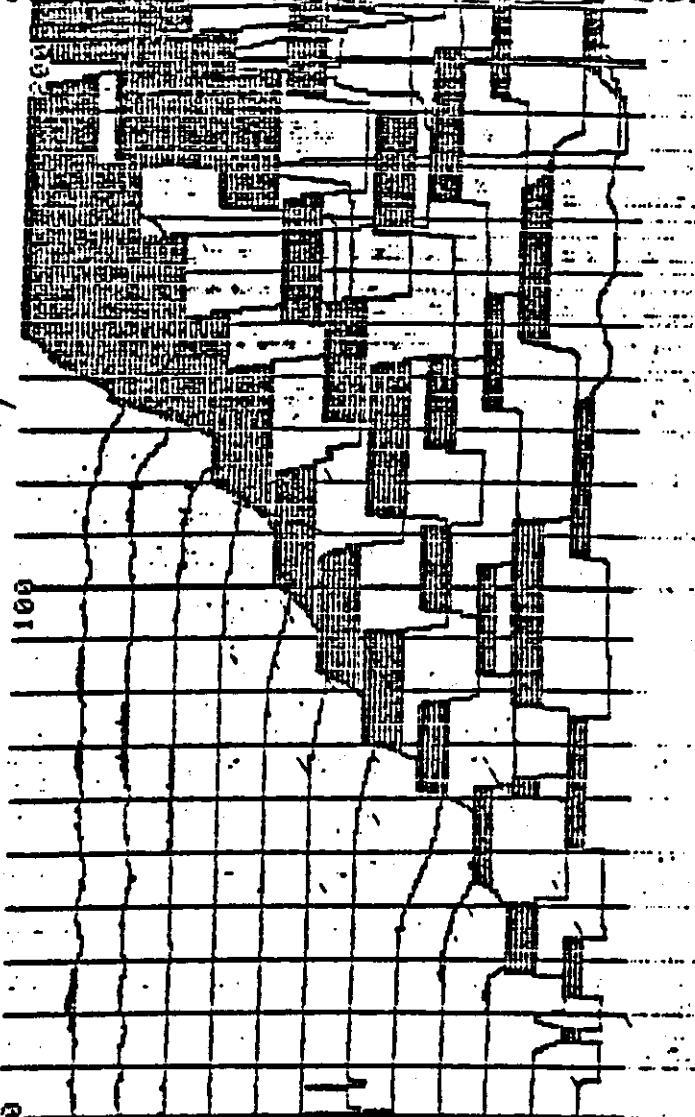
STACK COUNT

1

FILTER OUT

t_c / t_s

100
80
60
40
20
0



EG&G GEOMETRICS

EST-125
VERSION 2.0
FILE NO 1463

RECORD TIME

1000 MSEC

DELAY TIME

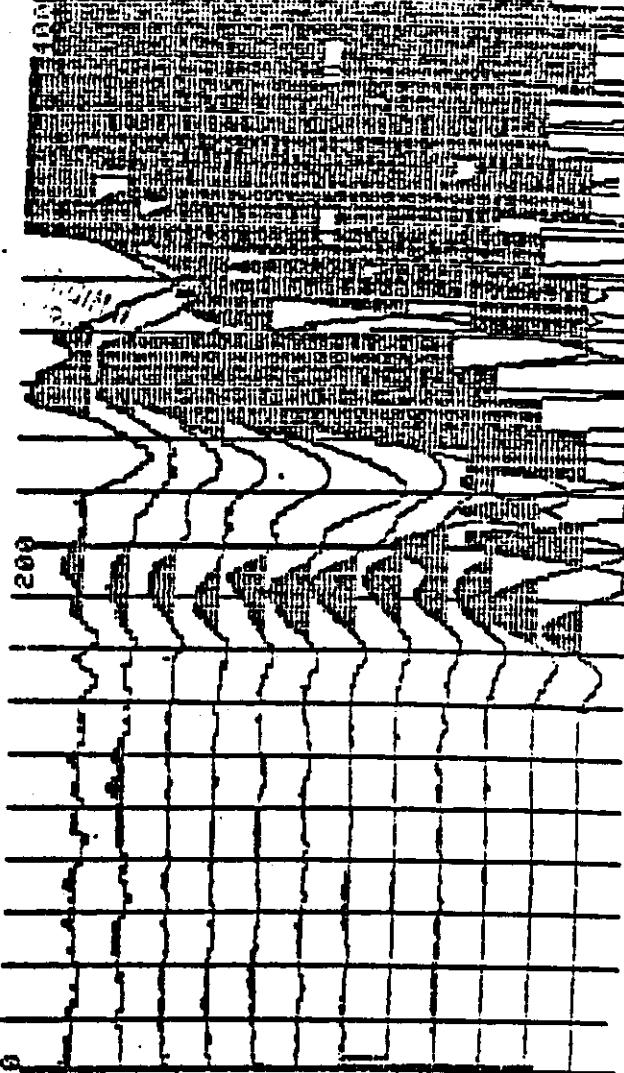
0 MSEC

STACK COUNT

1

FILTER OUT

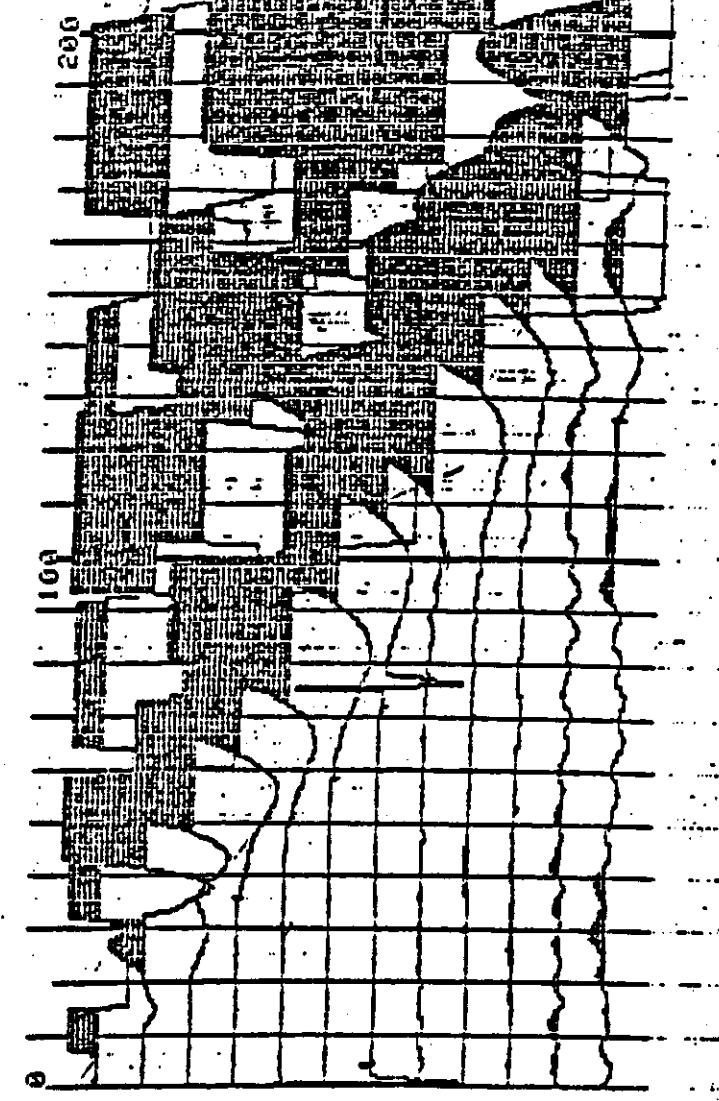
J male



200
100
0

AR000592

000592

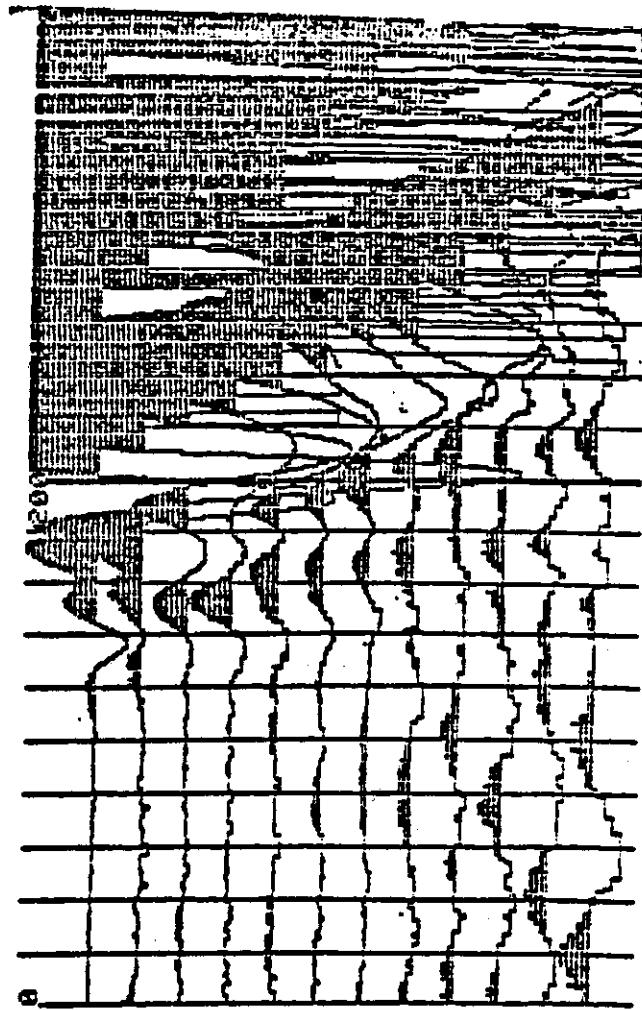


E&G GEOMETRICS
 EST-1225
 VERSION 2.0
 FILE NO 1463
 RECORD TIME 1 2 42 12
 500 MSEC 3 48 11
 1 4 54 11
 5 60 13
 6 60 11
 8 MSEC 7 60 12
 8 60 15
 STACK COUNT 9 60 13
 10 60 14
 11 60 16
 12 60 16
 FILTER OUT

DORNEY LANDFILL
 SP-9 LF

54 PM - 117188

Josie



E&G GEOMETRICS
 EST-1225
 VERSION 2.0
 FILE NO 1463
 RECORD TIME 1 2 42 12
 500 MSEC 3 48 11
 1 4 54 11
 5 60 13
 6 60 11
 8 MSEC 7 60 12
 8 60 15
 STACK COUNT 9 60 13
 10 60 14
 11 60 16
 12 60 16
 FILTER OUT

E&G GEOMETRICS
 EST-1225
 VERSION 2.0
 FILE NO 1463
 RECORD TIME 1 2 42 12
 500 MSEC 3 48 11
 1 4 54 11
 5 60 13
 6 60 11
 8 MSEC 7 60 12
 8 60 15
 STACK COUNT 9 60 13
 10 60 14
 11 60 16
 12 60 16
 FILTER OUT

DORNEY LANDFILL
 SP-9 LF 2:50 PM
 117188
 50' from 1100 N
 Groom
 between Trgs 3 &
 Josie

AR001593

00593

EG&G GEOMETRICS
ES-1265
VERSION 2.0
FILE NO 1463

RECORD TIME : 1 2 3 4 5 6 7 8 9 10 11 12
500 MSEC : 1 2 3 4 5 6 7 8 9 10 11 12
DELAY TIME : 1 2 3 4 5 6 7 8 9 10 11 12
0 MSEC : 1 2 3 4 5 6 7 8 9 10 11 12

STACK COUNT

facile

FILTER OUT

SP-10A DORNEY LANDFILL
11:08AM 1/8/88

AR000594

EG&G GEOMETRICS
ES-1265
VERSION 2.0
FILE NO 1463

RECORD TIME : 1 2 3 4 5 6 7 8 9 10 11 12
500 MSEC : 1 2 3 4 5 6 7 8 9 10 11 12
DELAY TIME : 1 2 3 4 5 6 7 8 9 10 11 12
0 MSEC : 1 2 3 4 5 6 7 8 9 10 11 12

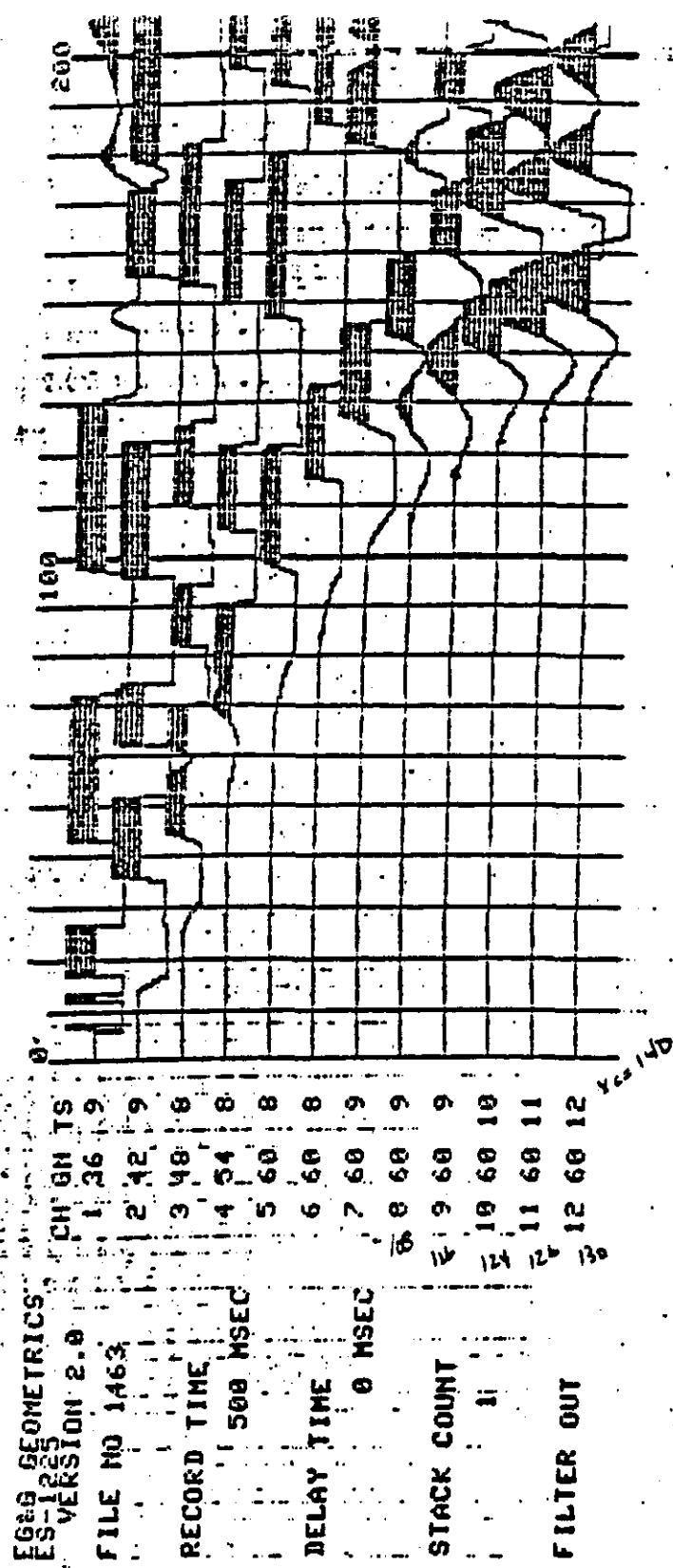
STACK COUNT

Facile

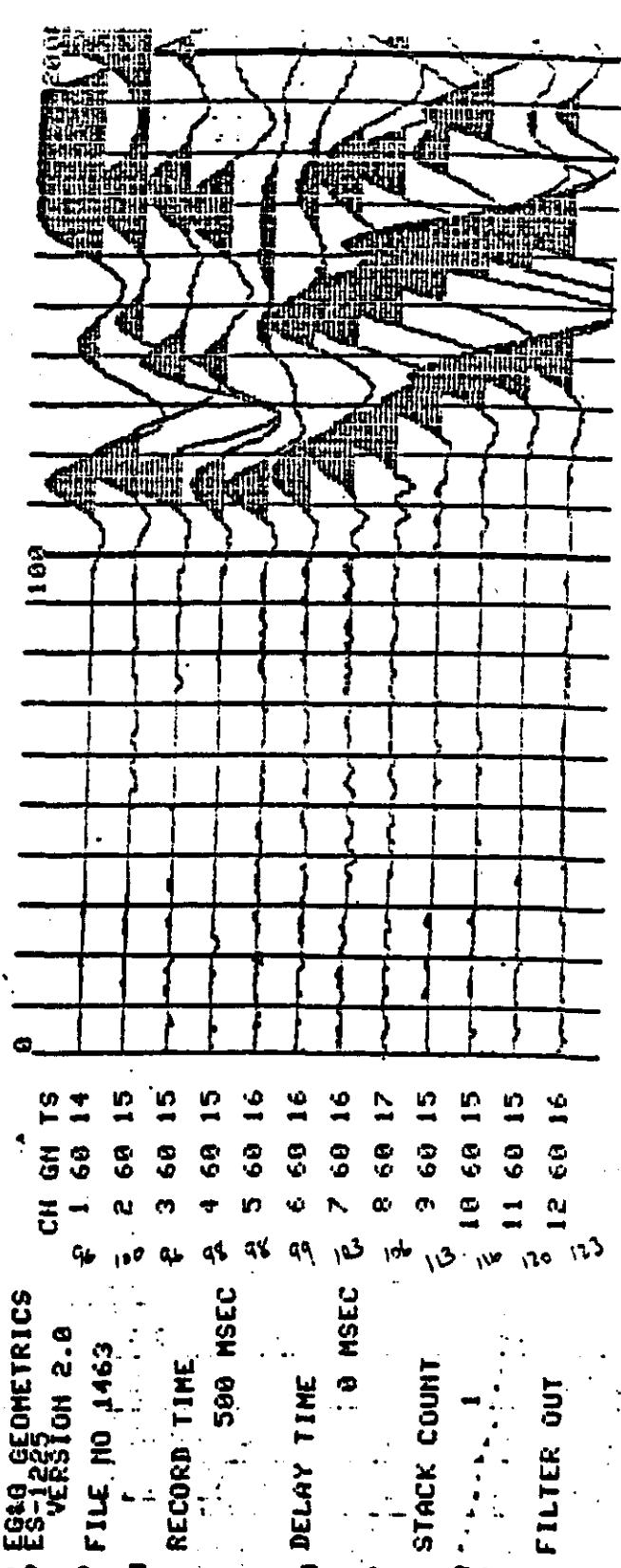
FILTER OUT

SP-10 LR DORNEY ROAD
11:17AM 1/8/88 Facile

UJ594



SP-10F DORNEY ROAD
11:02AM 1/8/83 smile

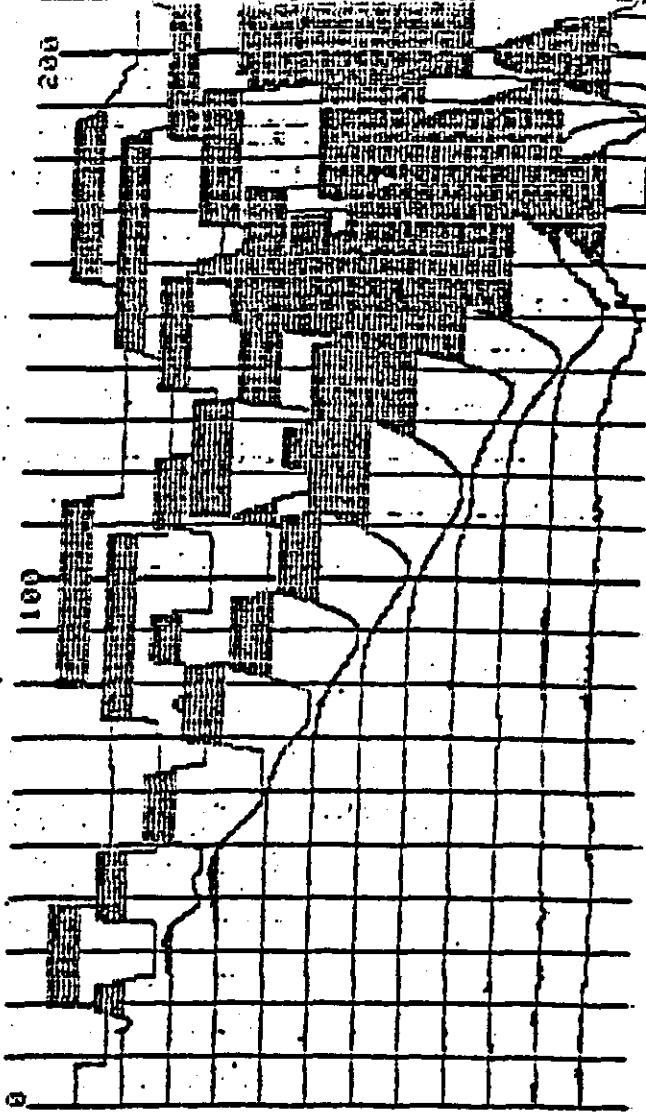


SP-10LF DORNEY LANDFILL
11:00 AM 1/5/28 Inside

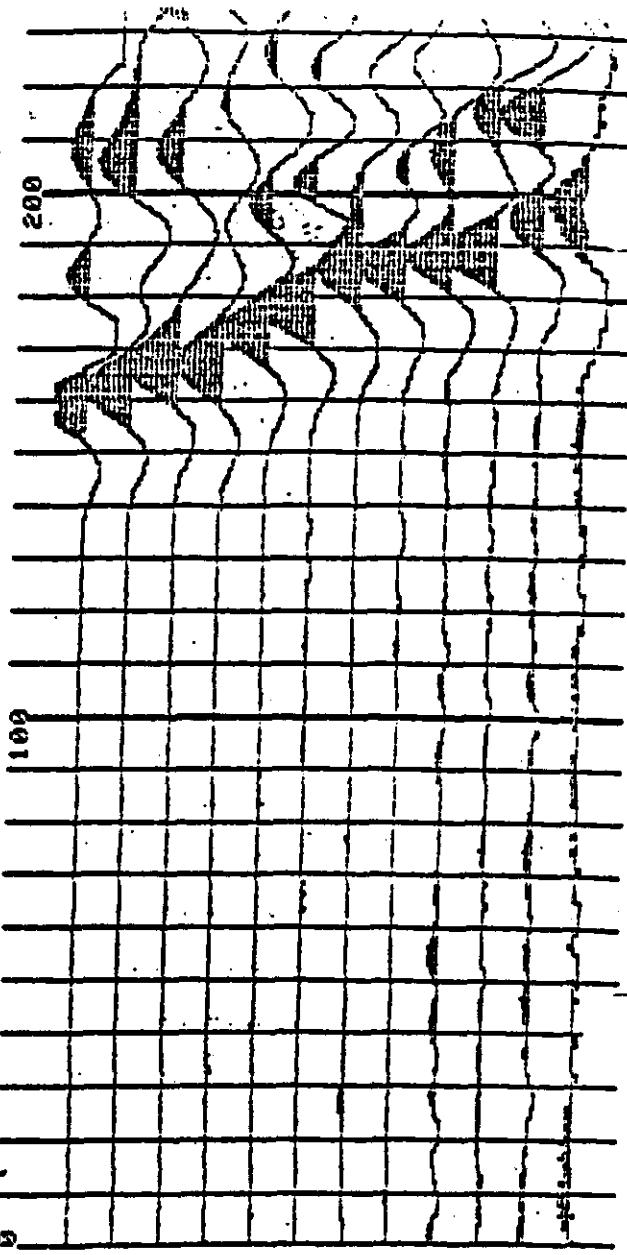
ج ۵۹۵

AR000595

EGG GEOMETRICS
 ES-1225
 VERSION 2.0
 FILE NO 1463
 RECORD TIME 500 MSEC
 DELAY TIME 6 60 10
 0 MSEC 7 60 11
 8 60 12
 9 60 15
 10 60 14
 11 60 15
 12 60 17
 STACK COUNT 12
 FILTER OUT
 SP-1IF DORNEY LANDFILL
 11:29AM 1/5/88 Jessie

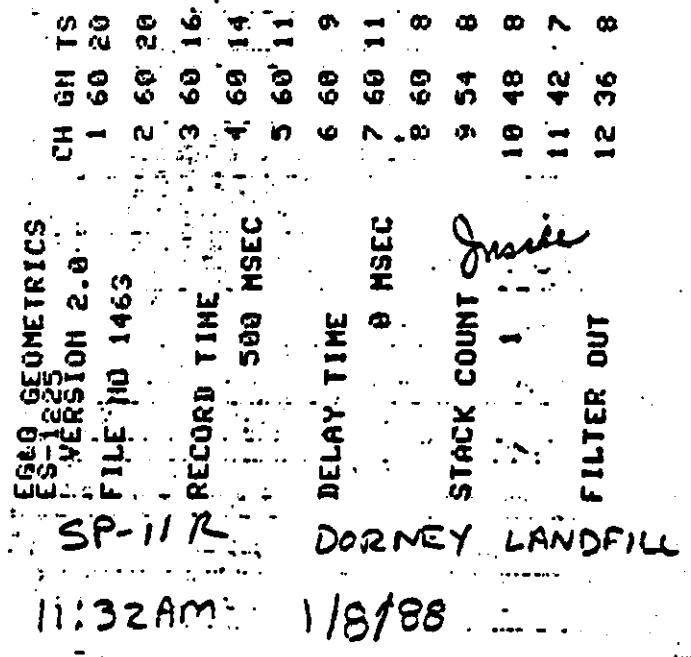


EGG GEOMETRICS
 ES-1225
 VERSION 2.0
 FILE NO 1463
 RECORD TIME 500 MSEC
 DELAY TIME 6 60 14
 0 MSEC 7 60 15
 8 60 15
 9 60 16
 10 60 16
 11 60 16
 12 60 18
 STACK COUNT 1
 FILTER OUT
 SP-1LF DORNEY LANDFILL
 11:27AM 1/5/88 Jessie



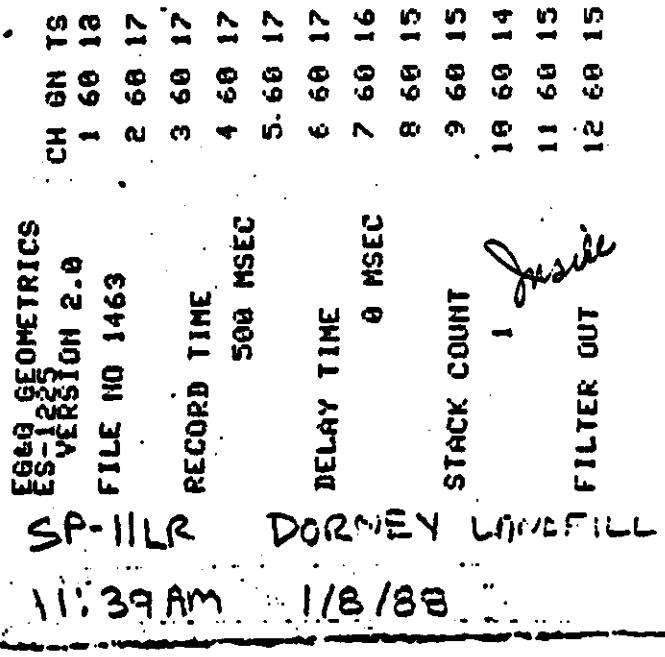
AR000596

000596



000597

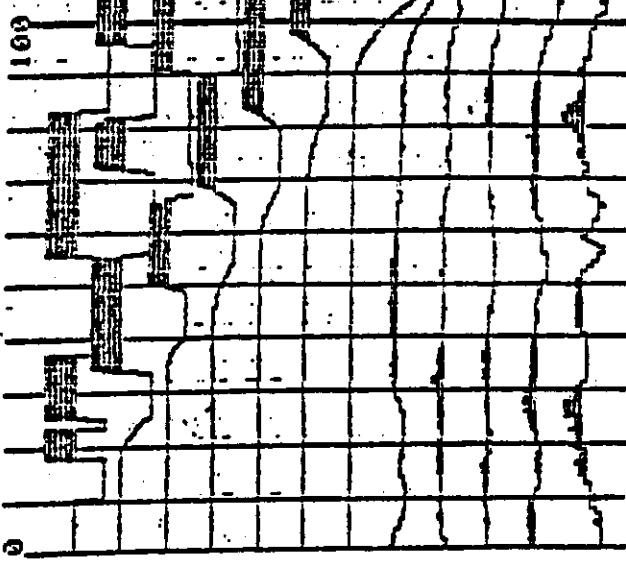
AR000597



EG&G GEOMETRICS
ES-1225 VERSION 2.0
FILE NO 1463

SP-12 F RECORD TIME 0 MSEC 500
DELAY TIME 6 60 8
STACK COUNT 1
FILTER OUT *baseline*

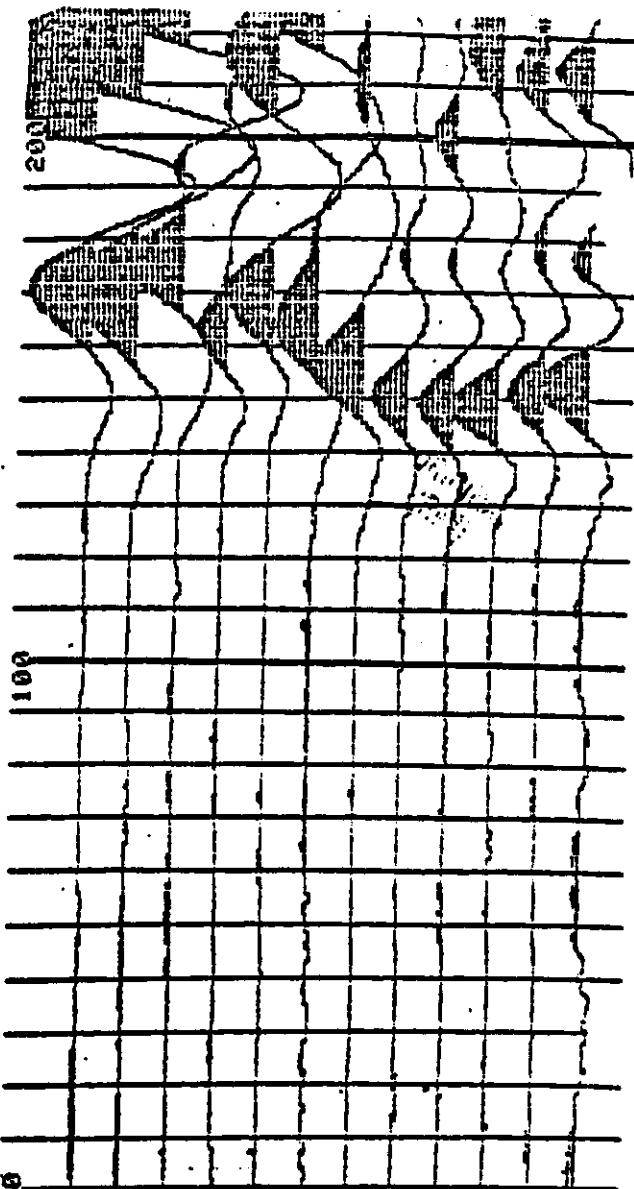
SP-12 F DORNEY LANDFILL
11:48 AM 1/8/88



EG&G GEOMETRICS
ES-1225 VERSION 2.0
FILE NO 1463

SP-12 F RECORD TIME 0 MSEC 500
DELAY TIME 6 60 14
STACK COUNT 1
FILTER OUT *baseline*

SP-12 F DORNEY LANDFILL
11:46 AM 1/8/88



AR000598

000598

EGG GEOMETRICS

ES-1225
VERSION 2.0

FILE NO 1463

RECORD TIME

500 MSEC

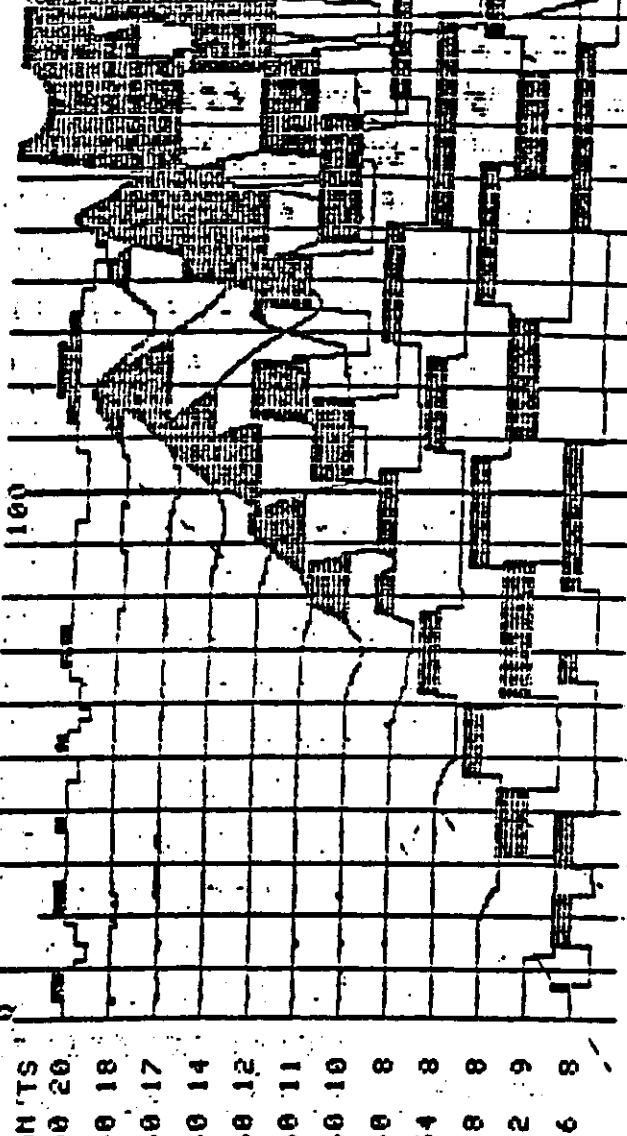
DELAY TIME

0 MSEC

STACK COUNT

1

FILTER OUT

spillSP-12R DORNEY LANDFILL
11:51 1/8/88

000599

EGG GEOMETRICS

ES-1225
VERSION 2.0

FILE NO 1463

RECORD TIME

500 MSEC

DELAY TIME

0 MSEC

STACK COUNT

1

FILTER OUT

SP-12 LR DORNEY LANDFILL
11:54 AM - 1/8/88 - *spill*

AR000599

EGG GEOMETRICS

EST-125
VERSION 2.0
FILE NO 1463

RECORD TIME

500 MSEC

DELAY TIME

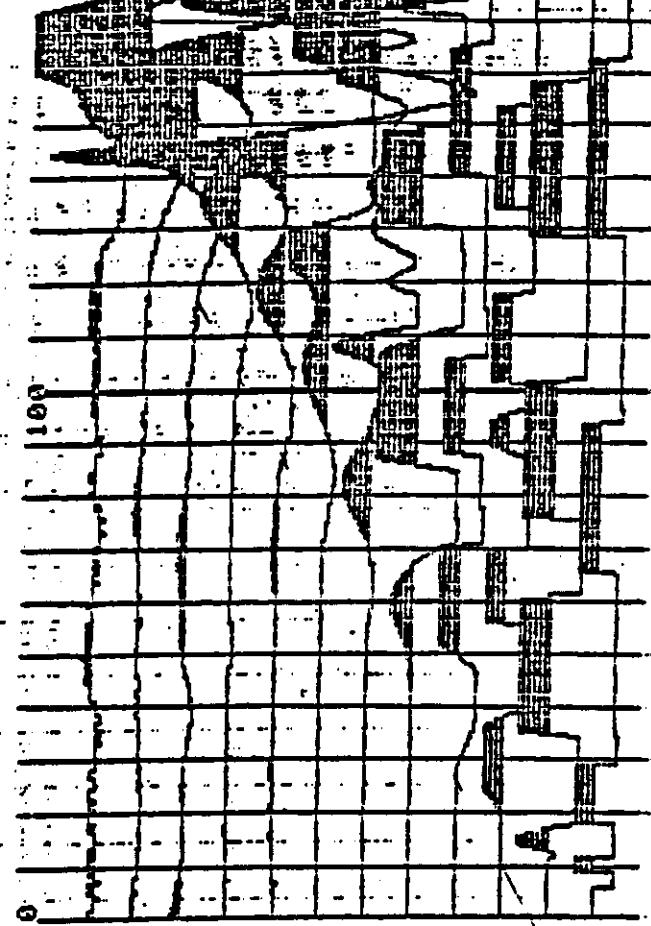
0 MSEC

STACK COUNT

1

FILTER OUT

12 36 8

SP-13 R DORNEY LANDFILL
2:25 PM 1/8/85 *Jesse*

EGG GEOMETRICS

EST-125
VERSION 2.0
FILE NO 1463

RECORD TIME

500 MSEC

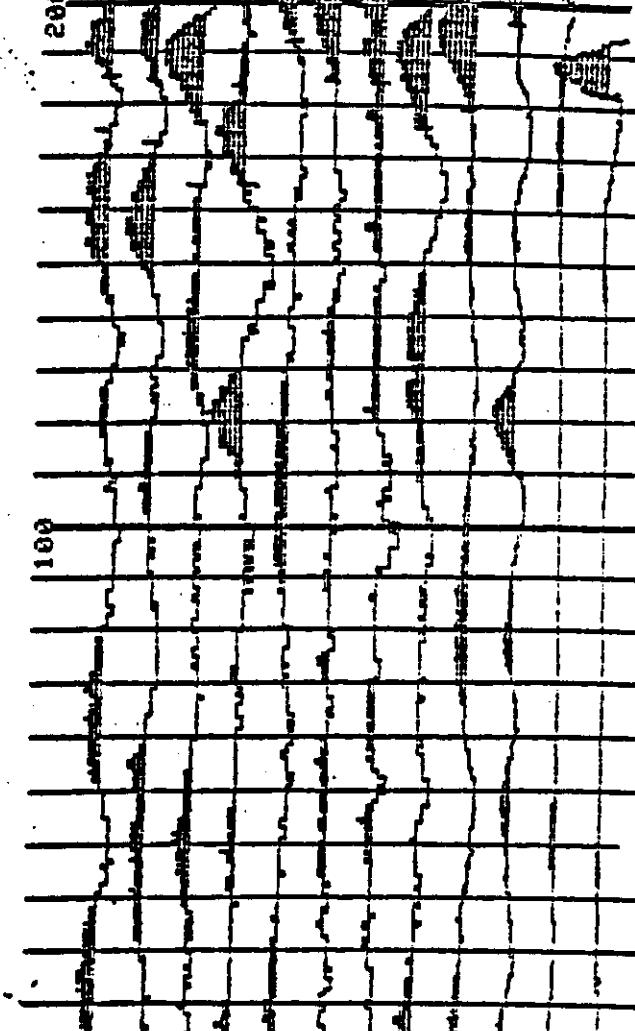
DELAY TIME

0 MSEC

STACK COUNT

1

FILTER OUT

JacieSP-13 LR DORNEY LANDFILL
2:41 PM 1/8/85 190' offset

AR000600

VVJ600

EG&G GEOMETRICS
EST-125

FILE NO 1463

RECORD TIME

500 MSEC

DELAY TIME

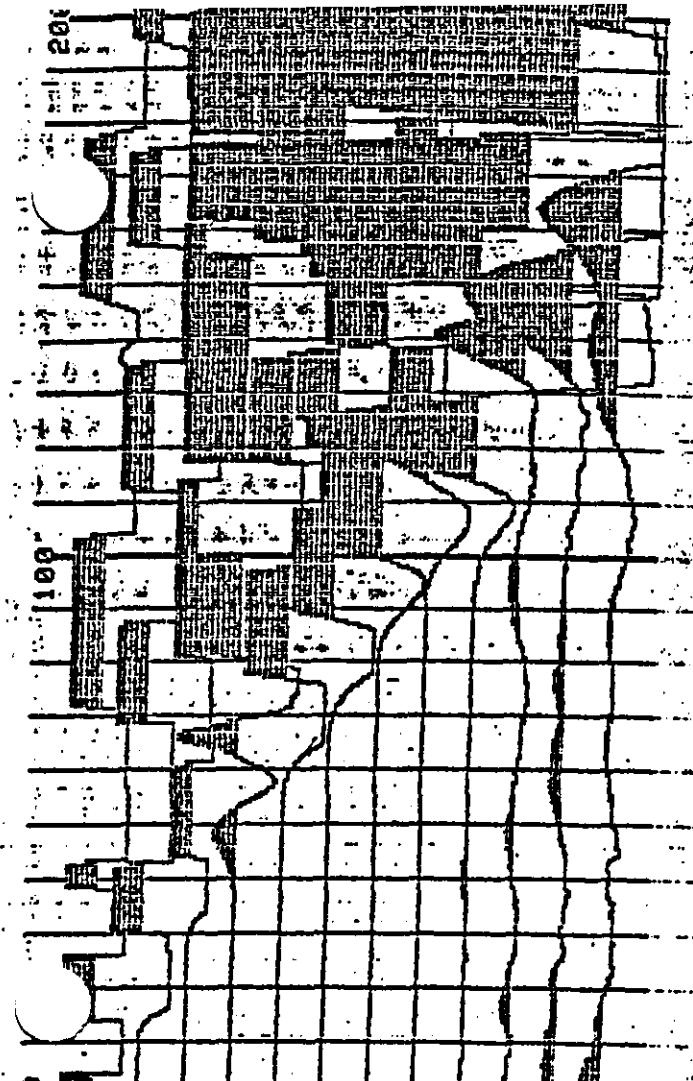
0 MSEC

STACK COUNT

1

FILTER OUT

12 60 16



SP-13 F DORNEY LANDFILL

2:22 PM 1/8/88

Jessie

000601

EG&G GEOMETRICS
EST-125

FILE NO 1463

RECORD TIME

500 MSEC

DELAY TIME

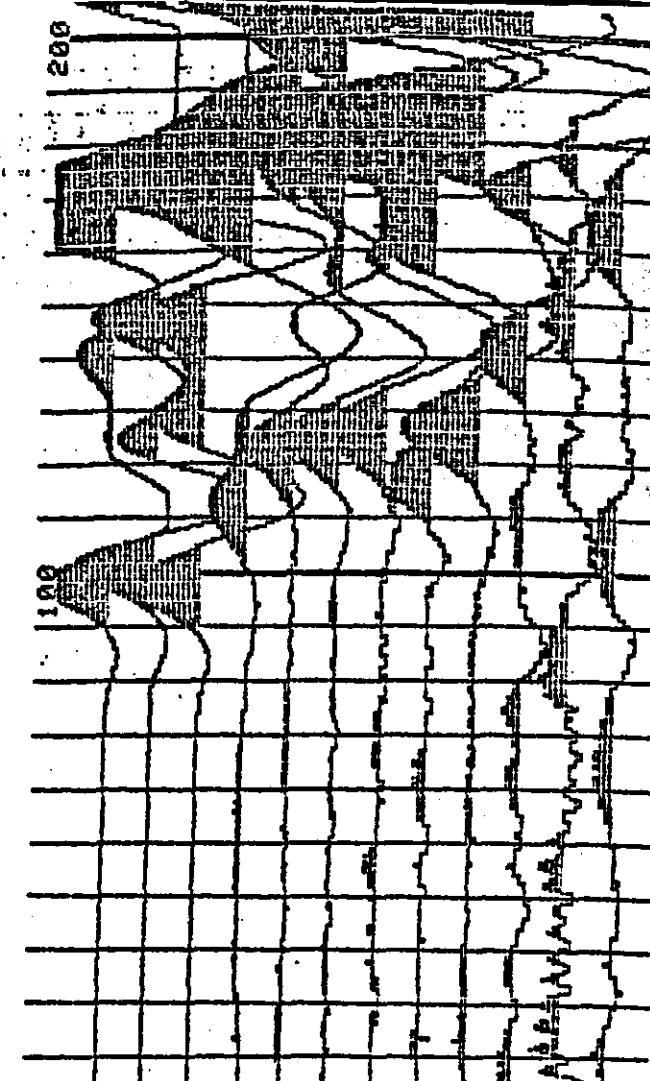
0 MSEC

STACK COUNT

1

FILTER OUT

12 60 16



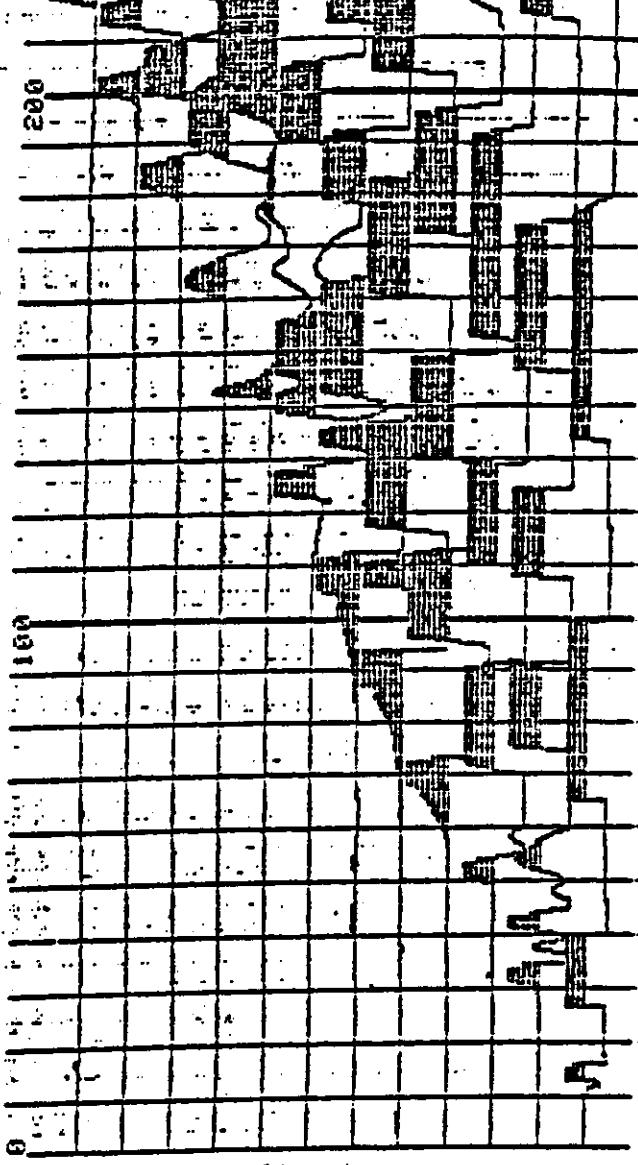
SP-13 LF DORNEY LANDFILL

2:19 PM 1/8/88

Jessie

EG&G GEOMETRICS
 ES-1225
 VERSION 2.0
 FILE NO 1463
 RECORD TIME 500 MSEC
 DELAY TIME 0 MSEC
 STACK COUNT 1
 FILTER OUT

SP-14 R DORNEY LANDFILL
 3:39 PM 1/8/88



EG&G GEOMETRICS
 ES-1225
 VERSION 2.0
 FILE NO 1463
 RECORD TIME 1000 MSEC
 DELAY TIME 0 MSEC
 STACK COUNT 1
 FILTER OUT

SP-14 LR DORNEY LANDFILL

3:43 PM 1/8/88 result
 changed rec length

AR000602 000302

E&G GEOMETRICS
ES-1225
VERSION 2.0
FILE NO 1463

RECORD TIME

500 MSEC

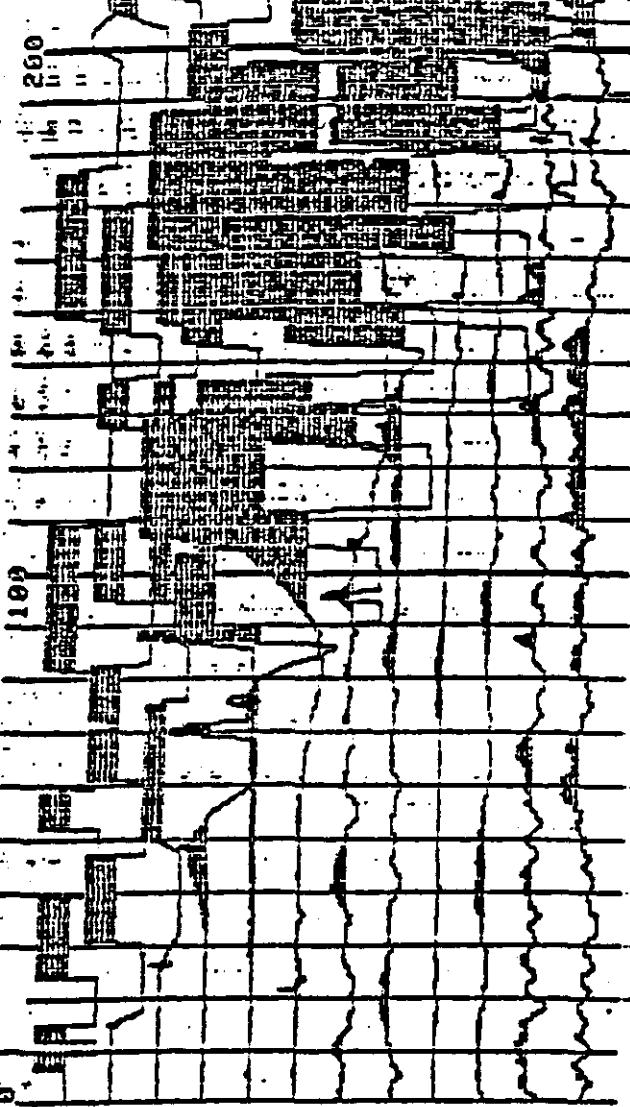
DELAY TIME
0 MSEC

STACK COUNT

1 36 9
2 42 9
3 48 8
4 54 10
5 60 13
6 60 13
7 60 14
8 60 13
9 60 13
10 60 14
11 60 15
12 60 16

FILTER OUT

SP-14F DORNEY LANDFILL
3:03 PM 1/8/88 small



E&G GEOMETRICS
ES-1225
VERSION 2.0
FILE NO 1463

RECORD TIME

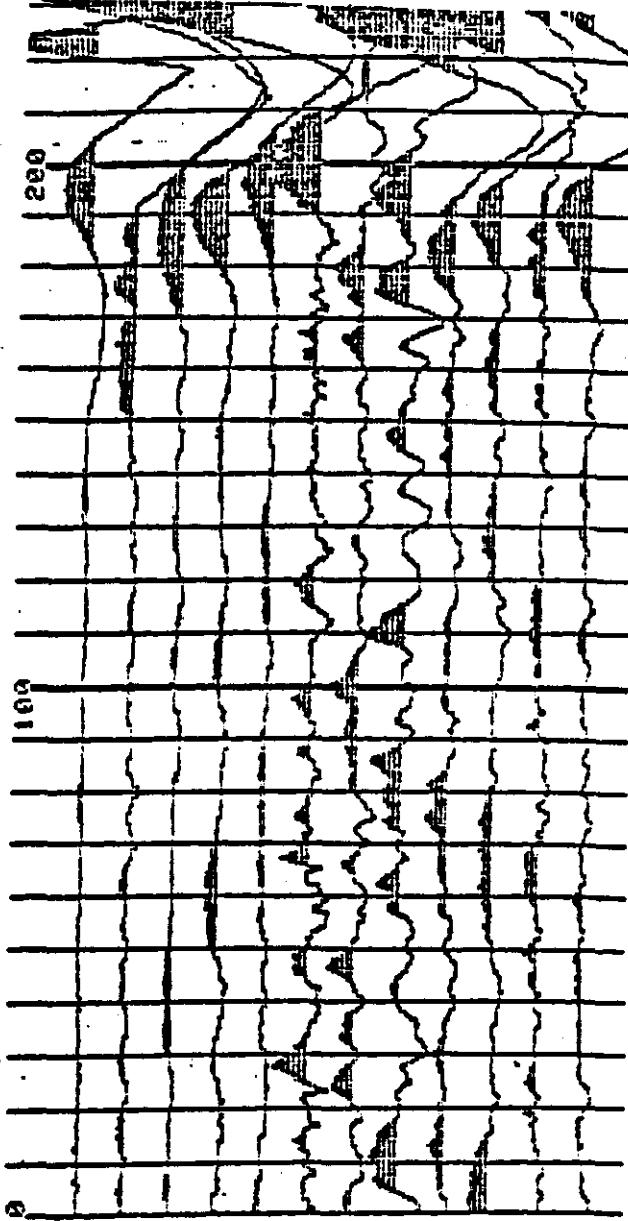
500 MSEC

DELAY TIME
0 MSEC

STACK COUNT
1 60 16
2 60 15
3 60 15
4 60 16
5 60 16
6 60 17
7 60 15
8 60 16
9 60 16
10 60 16
11 60 15
12 60 16

FILTER OUT
small

SP-14LF DORNEY LANDFILL
3:00 PM 1/8/88



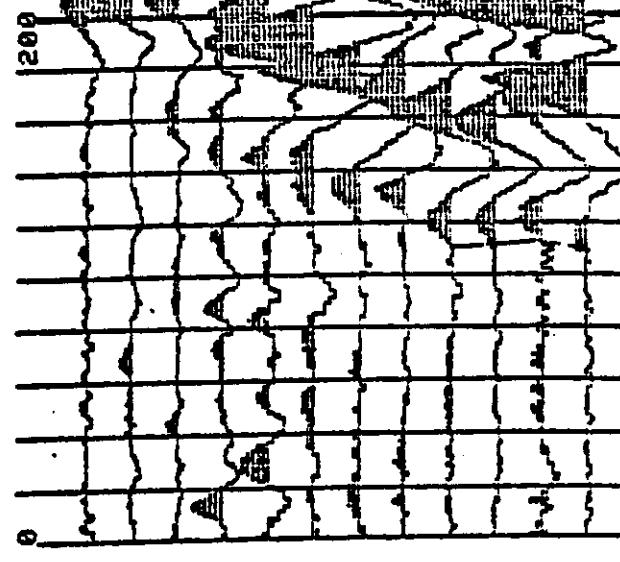
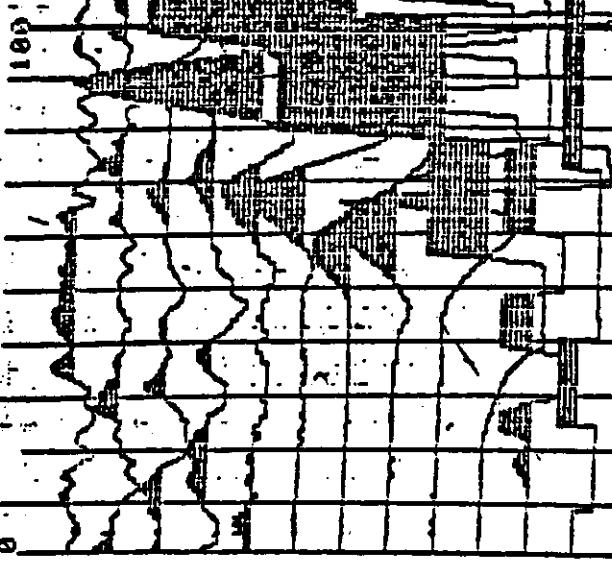
CCUSU3
AR000603

EGET GEOMETRICS

EST-125
VERSION 2.0
FILE NO 1463

RECORD TIME 1 60 16
2 60 17
3 60 15
4 60 13
5 60 18
6 60 14
7 60 13
8 60 13
9 54 14
10 48 11
11 42 9
12 36 8

SP-15 DORNEY LANDFILL
3:59PM 1/8/88 Justie



EGET GEOMETRICS
EST-125
VERSION 2.0
FILE NO 1463

RECORD TIME 1 60 12
2 60 13
3 60 12
4 60 12
5 60 18

DELAY TIME 6 60 18
7 60 18
8 60 17

STACK COUNT 1 Justie

FILTER OUT 12 60 17

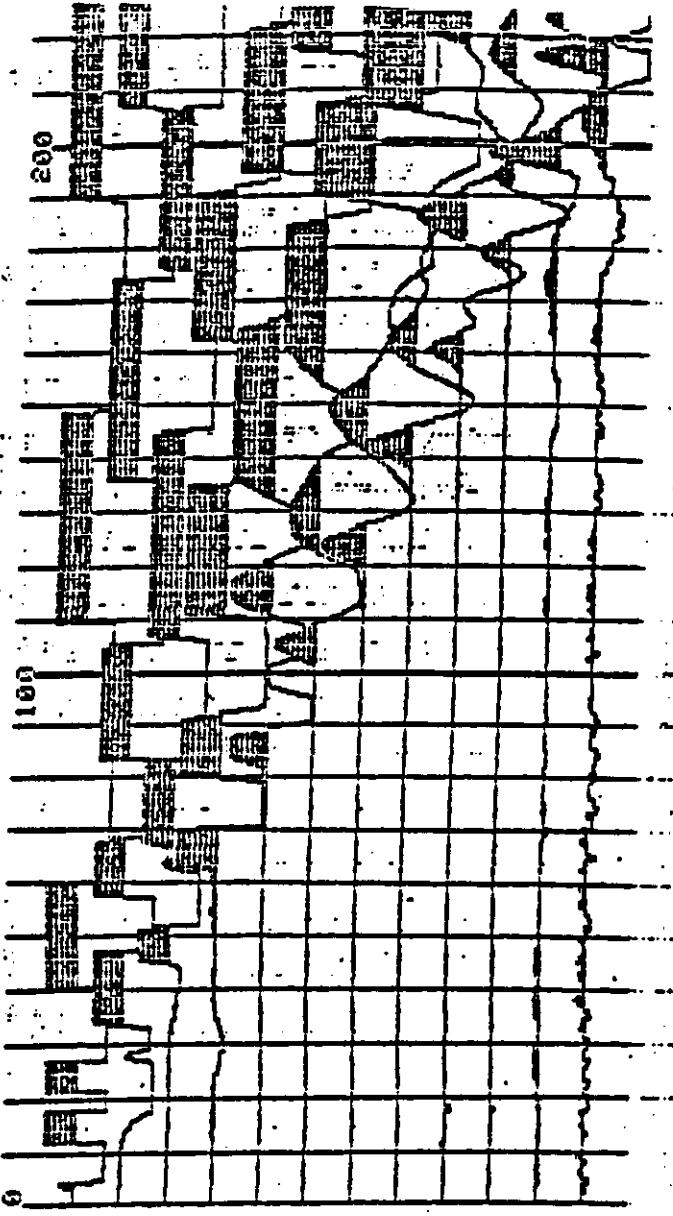
SP-15 DORNEY LANDFILL

4:04 PM 1/8/88

000604

AR000604

G&G GEOMETRICS
 VERSION 2.0
 FILE NO 1463
 RECORD TIME 3 48 .9
 DELAY TIME 0 HSEC 7 60 11
 STACK COUNT 9 60 11
 FILTER OUT 12 60 15
 Sp-15n DORNEY LANDFILL
 3:56 PM 1/8/88



G&G GEOMETRICS
 VERSION 2.0
 FILE NO 1463
 RECORD TIME 1000 HSEC 4 60 11
 DELAY TIME 0 HSEC 6 60 14
 STACK COUNT 9 60 14
 FILTER OUT 12 60 16

Sp-15 LF DORNEY LANDFILL
 2:52 PM 1/8/88

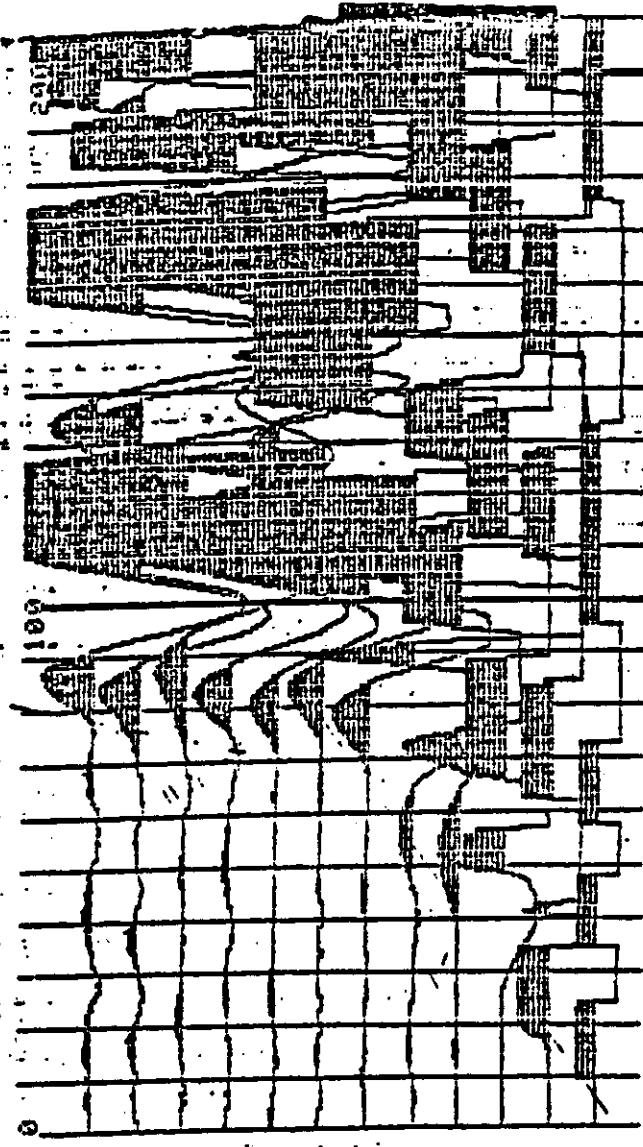
Sp-15
 1/8/88

AR000605

600605

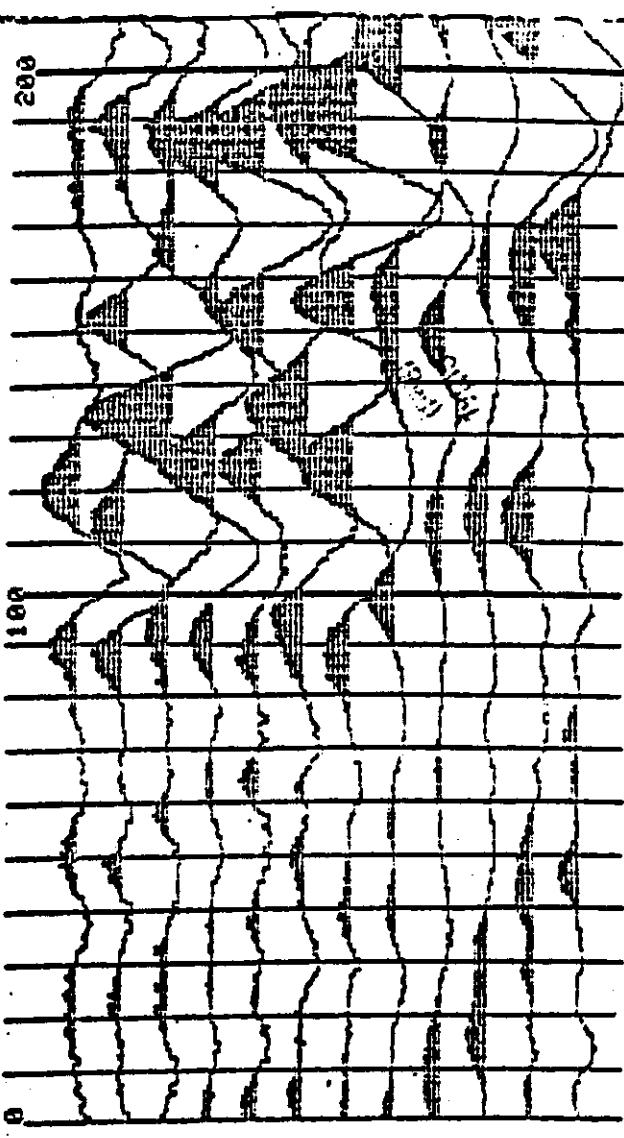
EGEG GEOMETRICS
 ES-1285 VERSION 2.0
 FILE NO 1463
 RECORD TIME 0 MSEC
 DELAY TIME 0 MSEC
 STACK COUNT 1
 FILTER OUT Oracle

SP-1GR DORNEY
 LANTDFILM
 10:06 AM 1/11/98



EGEG GEOMETRICS
 ES-1285 VERSION 2.0
 FILE NO 1463
 RECORD TIME 0 MSEC
 DELAY TIME 0 MSEC
 STACK COUNT 1
 FILTER OUT Oracle

SP-16LR DORNEY LANTDFILM
 10:17AM 1/11/98



AR000606

000606

EGG GEOMETRICS
 EST-1225 VERSION 2.0
 FILE NO 1463
 RECORD TIME
 1 36 9
 2 42 9
 3 43 6
 4 54 8
 5 60 8
 6 60 8
 7 60 9
 8 60 9
 9 60 8
 10 60 9
 11 60 10
 12 60 10
 DELAY TIME 0 MSEC
 STACK COUNT 1 *desire*
 FILTER OUT

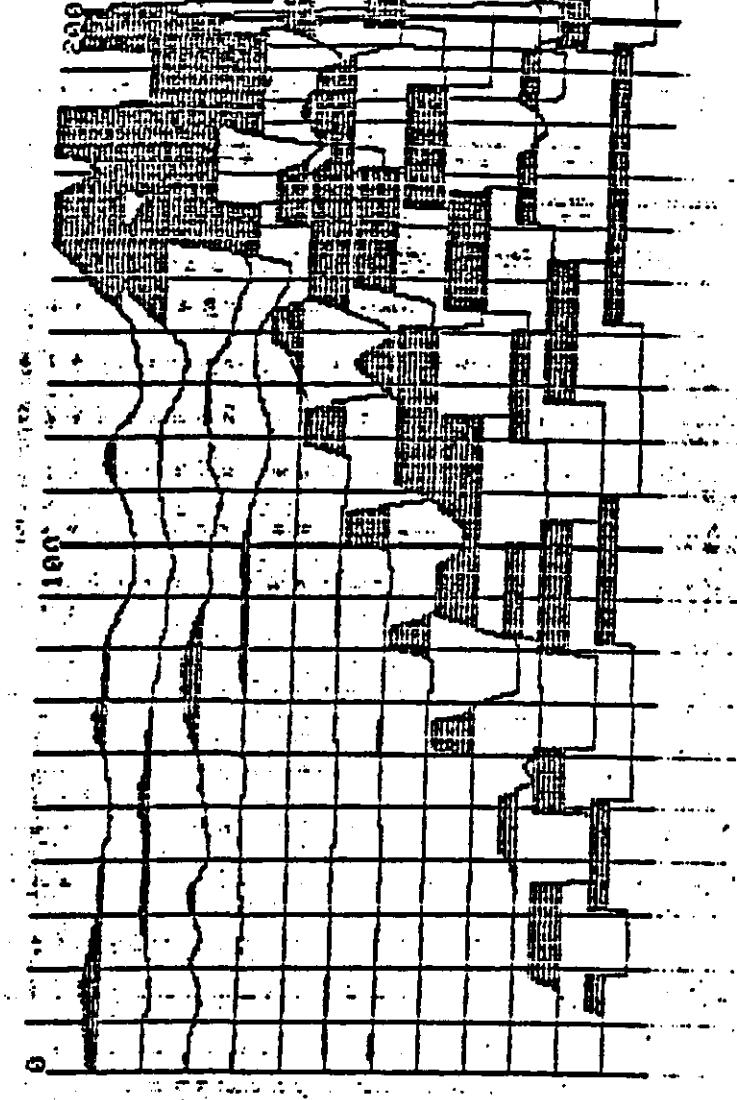
SP-1G T DORNEY LANDFILL
 9:59AM 1/11/88

600607

AR000607

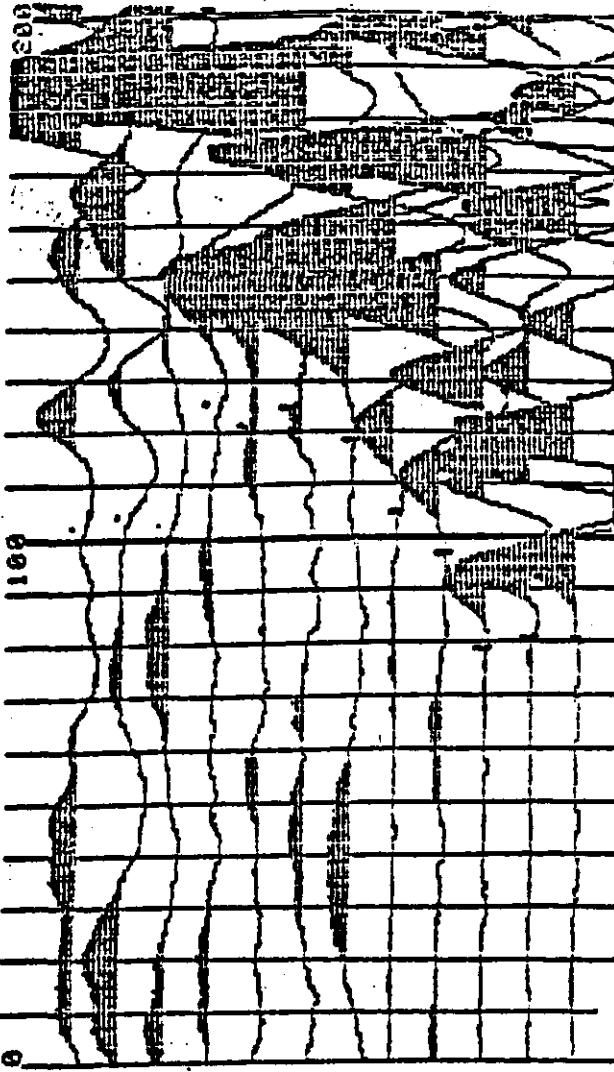
EGG GEOMETRICS
 EST-1225 VERSION 2.0
 FILE NO 1463
 RECORD TIME
 1 60 16
 2 60 15
 3 60 15
 4 60 16
 5 60 16
 6 60 16
 7 60 16
 8 60 16
 9 60 17
 10 60 15
 11 60 15
 12 60 16
 DELAY TIME 0 MSEC
 STACK COUNT 1
 FILTER OUT
 desire

SP-1G LF DORNEY LANDFILL
 9:56AM 1/11/88



EGGS GEOMETRICS
 EGG-1225 VERSION 2.0
 FILE NO 1463
 RECORD TIME 0 MSEC
 DELAY TIME 0 MSEC
 STACK COUNT 1
 FILTER OUT *discide*

SP-17R DORNEY LANDFILL
 10:41AM 1/11/88

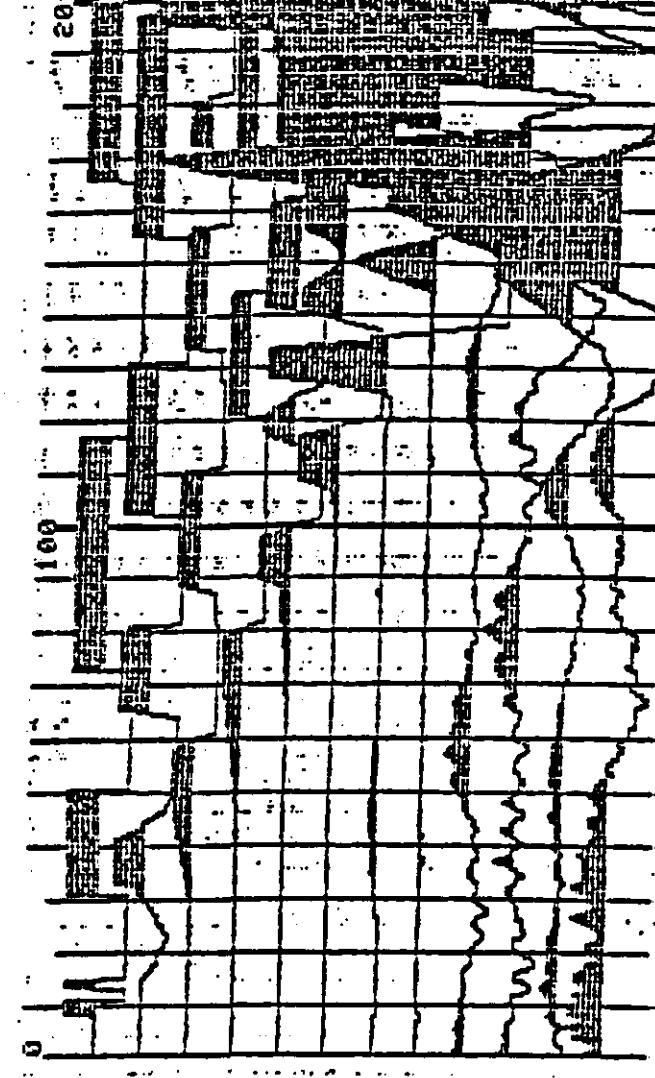


EGGS GEOMETRICS
 EGG-1225 VERSION 2.0
 FILE NO 1463
 RECORD TIME 500 MSEC
 DELAY TIME 0 MSEC
 STACK COUNT 1
 FILTER OUT *discide*

SP-17LR DORNEY LANDFILL
 10:46 AM 1/11/88

AR000608

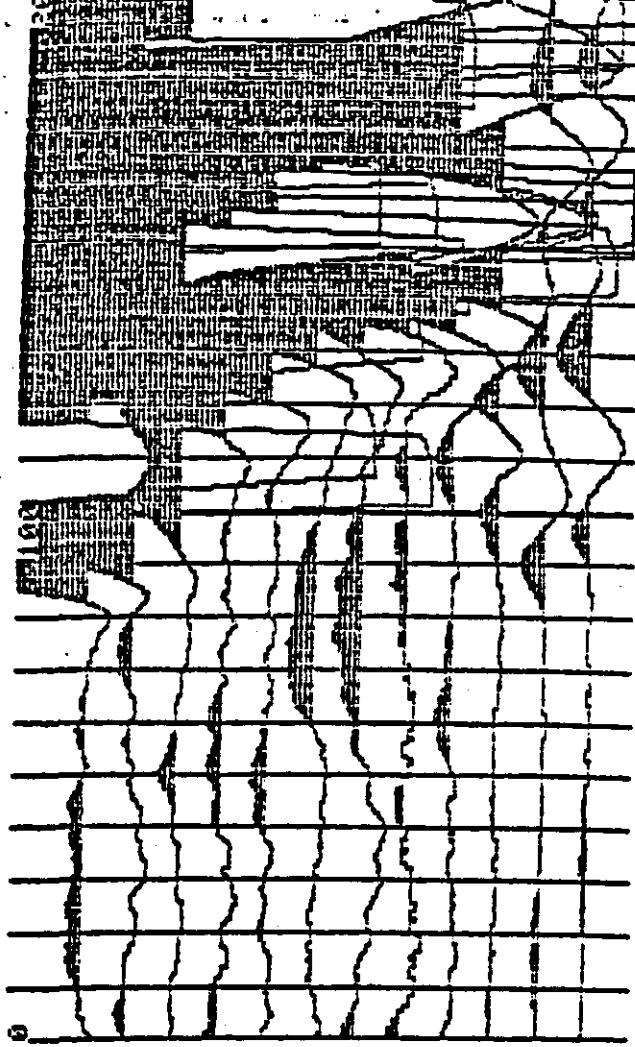
608



EGG GEOMETRICS
 ES-125 VERSION 2.0 FILE NO. 1463
 FILE NO. 1463 RECORD TIME 0:36 AM 1/11/98
 RECORD TIME 0:36 AM 1/11/98
 DELAY TIME 0:36 AM 1/11/98
 FILTER OUT Inside
 STACK COUNT 1
 FILTER OUT Inside
 DELAY TIME 0:36 AM 1/11/98
 FILTER OUT Inside
 RECORD TIME 0:36 AM 1/11/98
 FILTER OUT Inside

SP-17F DORNEY LANDFILL
 0:36 AM - 1/11/98

000609



EGG GEOMETRICS
 ES-125 VERSION 2.0 FILE NO. 1463 RECORD TIME 0:36 AM 1/11/98
 DELAY TIME 0:36 AM 1/11/98
 FILTER OUT Inside
 STACK COUNT 1
 FILTER OUT Inside
 DELAY TIME 0:36 AM 1/11/98
 FILTER OUT Inside
 RECORD TIME 0:36 AM 1/11/98
 FILTER OUT Inside

SP-17LF DORNEY LANDFILL
 10:36 AM . 1/11/98

AR000609

EG&G GEOMETRICS
 ES-1225 VERSION 2.0 CH GN TS
 FILE NO 1463 1 60 18
 RECORD TIME 2 60 17
 3 60 17
 4 60 16
 5 60 11
 6 60 10
 7 60 9
 8 60 9
 9 54 8
 10 48 8
 11 42 9
 12 36 8

desire

STACK COUNT

FILTER OUT

SP-18 L/R DORNEY
 LANDFILL
 10:58 AM 1/11/88

EG&G GEOMETRICS
 ES-1225 VERSION 2.0 CH GN TS
 FILE NO 1463 1 60 17
 RECORD TIME 2 60 16
 3 60 16
 4 60 17
 5 60 18
 6 60 19
 7 60 18
 8 60 18
 9 60 17
 10 60 18
 11 60 18
 12 60 17

SP-18 L/R DORNEY LANDFILL
 11:00 AM 1/11/88

AR000610

000510

EG&G GEOMETRICS

EST-1225

VERSION 2.0

FILE NO 1463

RECORD TIME

5000 MSEC

1 36 9

2 42 9

3 48 8

4 54 11

5 60 10

6 66 15

7 68 17

8 69 18

9 69 18

10 69 18

11 69 18

12 69 18

DELAY TIME

0 MSEC

STACK COUNT

FILTER OUT

SP-18

DORNEY LANDFILL

10:55 AM 1/11/88 *Janie*

000311

AR000611

EG&G GEOMETRICS

EST-1225

VERSION 2.0

FILE NO 1463

RECORD TIME

5000 MSEC

1 69 15

2 69 15

3 69 16

4 69 15

5 69 17

6 69 18

7 69 16

8 69 17

9 69 18

10 69 18

11 69 18

12 69 19

DELAY TIME

0 MSEC

STACK COUNT

Janie

FILTER OUT

SP-18

LF DORNEY LANDFILL

10:53 AM 1/11/88

EG&G GEOMETRICS

VERSION 2.0

FILE NO 1463

RECORD TIME

5000 MSEC

DELAY TIME

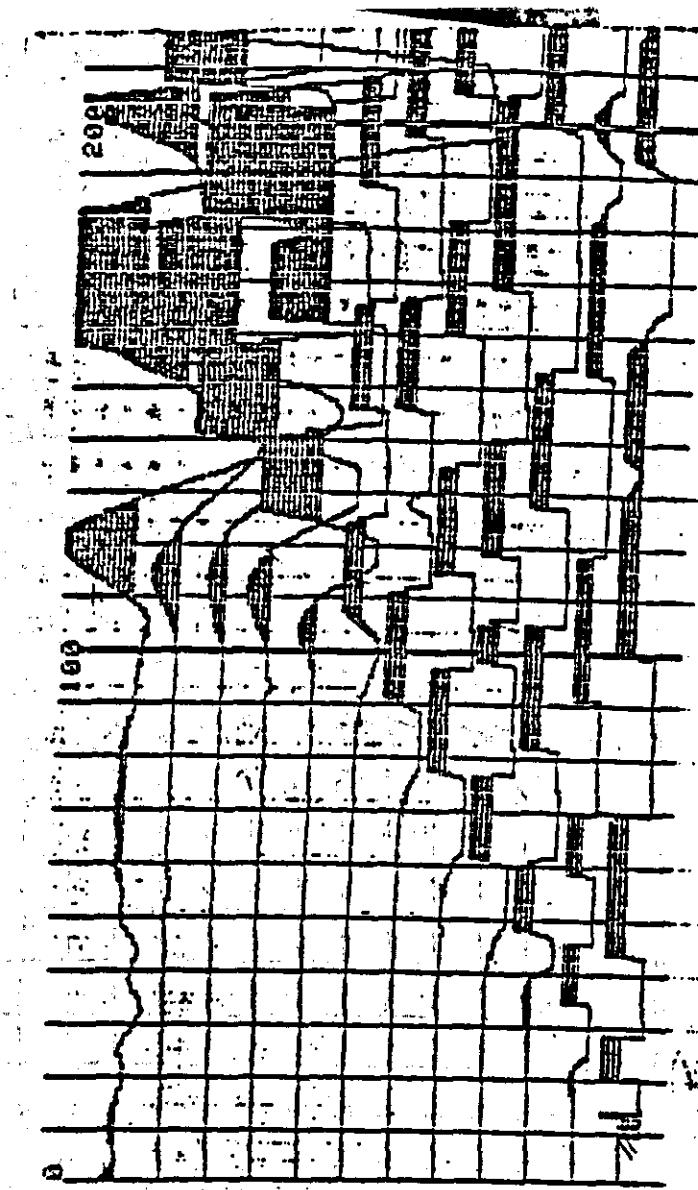
0 MSEC

STACK COUNT

1

FILTER OUT

12 36 8



Land fill Sp 19 R Inside

EG&G GEOMETRICS

VERSION 2.0

FILE NO 1463

RECORD TIME

2000 MSEC

DELAY TIME

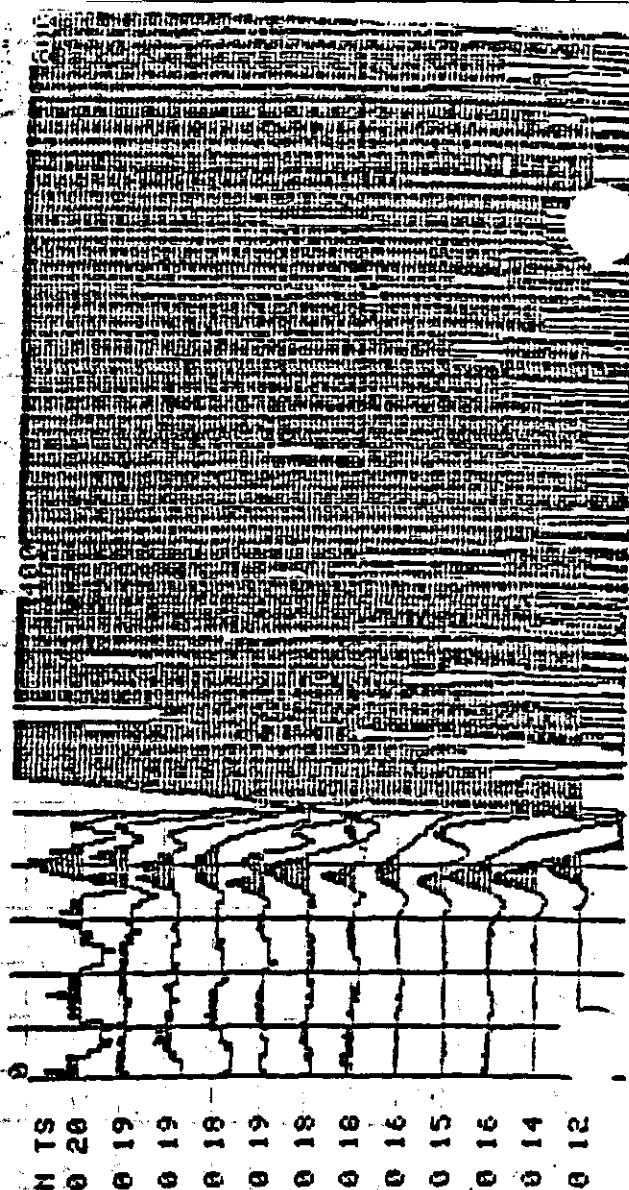
0 MSEC

STACK COUNT

1

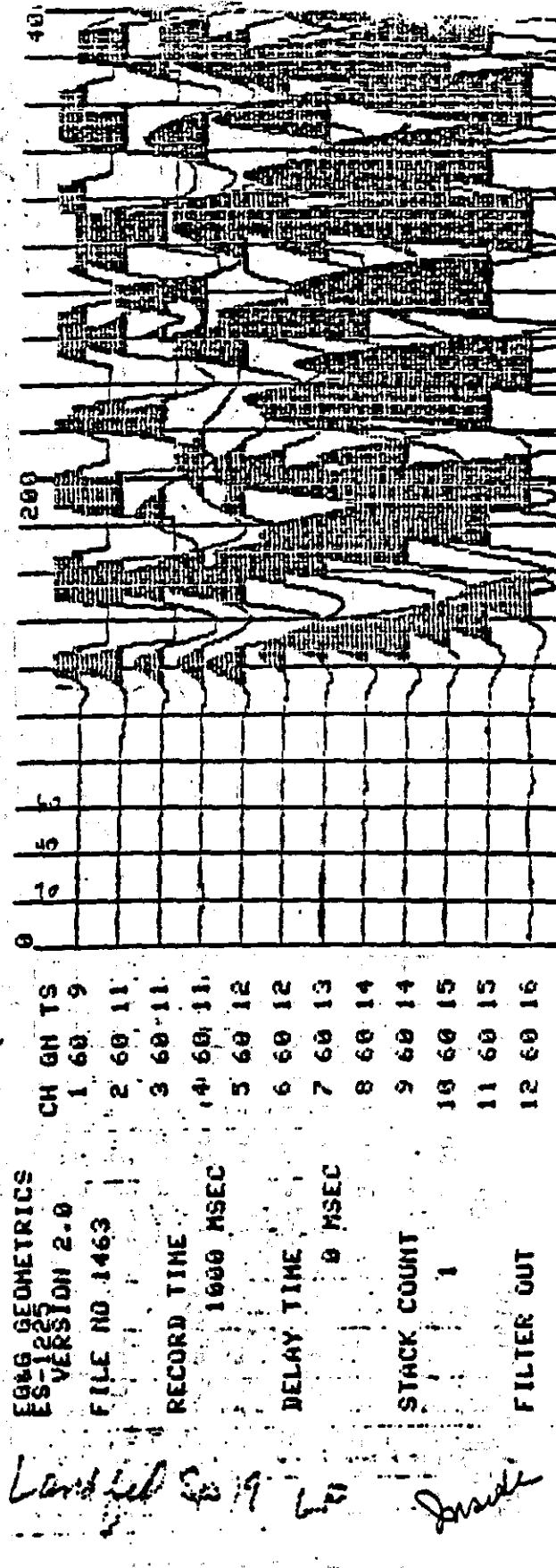
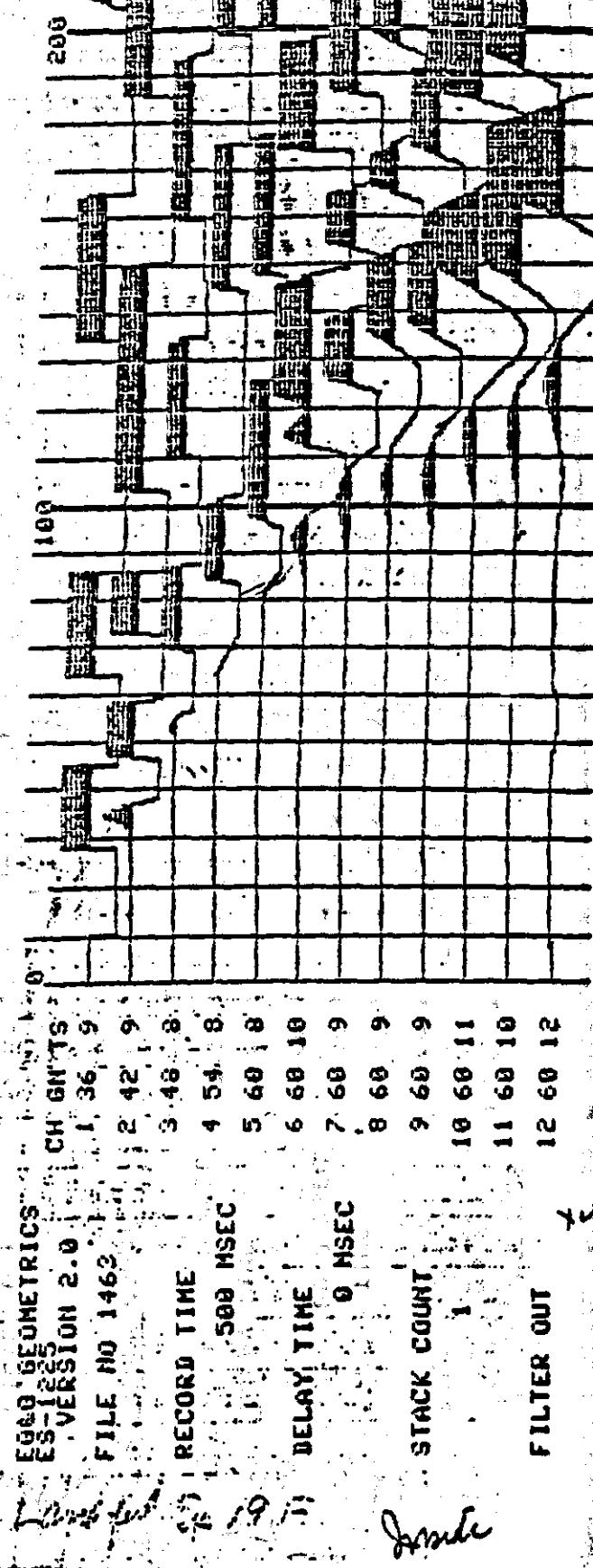
FILTER OUT

12 60 12



AR000612

Land fill Sp 19
LR
Begin (2) End
2nd Line
2nd List
Inside



000613

AR000613

EGG GEOMETRICS

ES-1225 VERSION 2.0

FILE NO 1463

RECORD TIME

1 60 16

2 60 11

3 60 16

4 60 9

5 60 8

6 60 8

7 60 8

8 60 8

9 54 8

10 48 8

11 42 9

12 36 8

DELAY TIME

0 MSEC

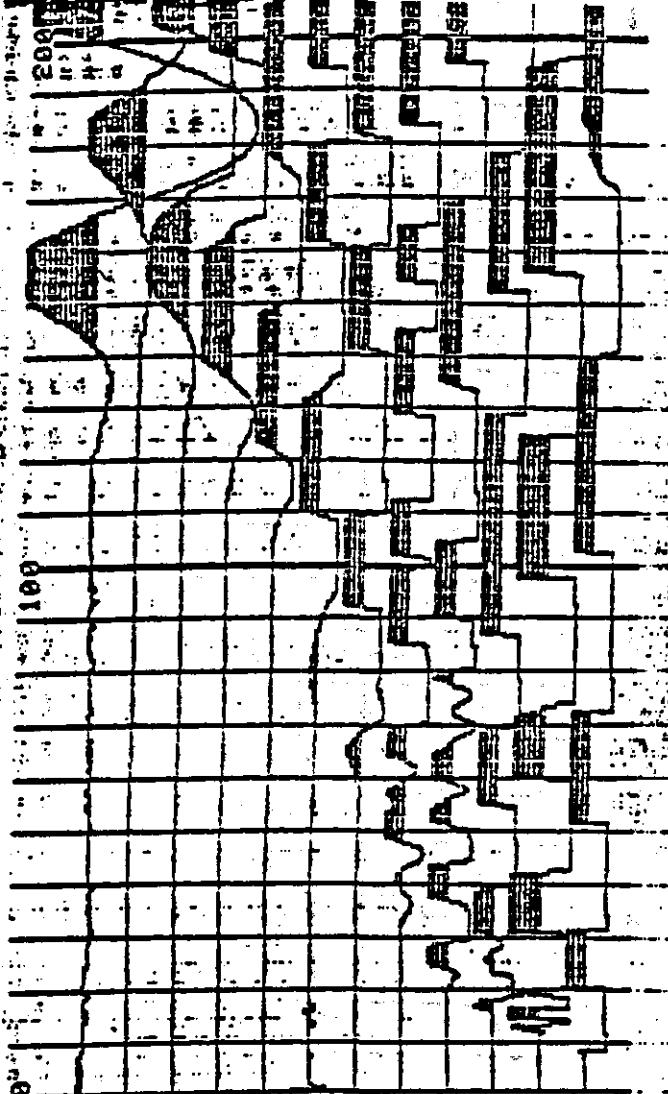
STACK COUNT

1

FILTER OUT

Longest Sp 202
First

Inside



EGG GEOMETRICS

ES-1225 VERSION 2.0

FILE NO 1463

RECORD TIME

1 60 20

2 60 21

3 60 19

4 60 19

5 60 18

6 60 18

7 60 18

8 60 18

9 60 17

10 60 16

11 60 12

12 60 10

DELAY TIME

0 MSEC

STACK COUNT

1

FILTER OUT

Last file Sep 2012
This is 2nd line
Inside

AR000614

003664

EGG GEOMETRICS
ES-VERSION 2.0

FILE NO. 1463

RECORD TIME

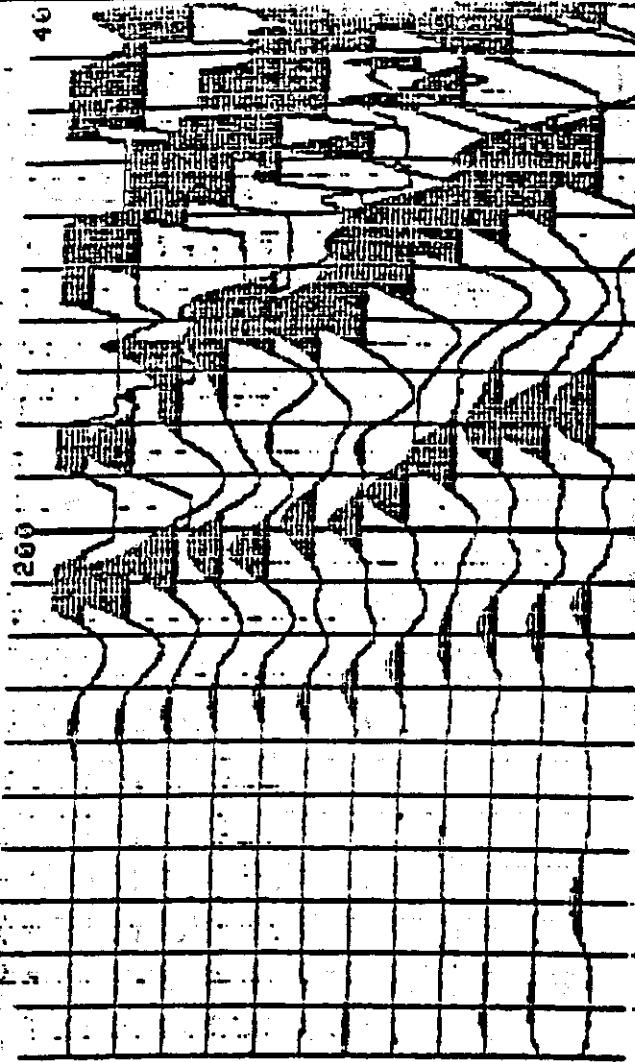
1000 MSEC

DELAY TIME

1000 MSEC

STACK COUNT

FILTER OUT



Sep 20 LF Land fill
inside

6006L5

EGG GEOMETRICS

ES-VERSION 2.0

FILE NO. 1463

RECORD TIME

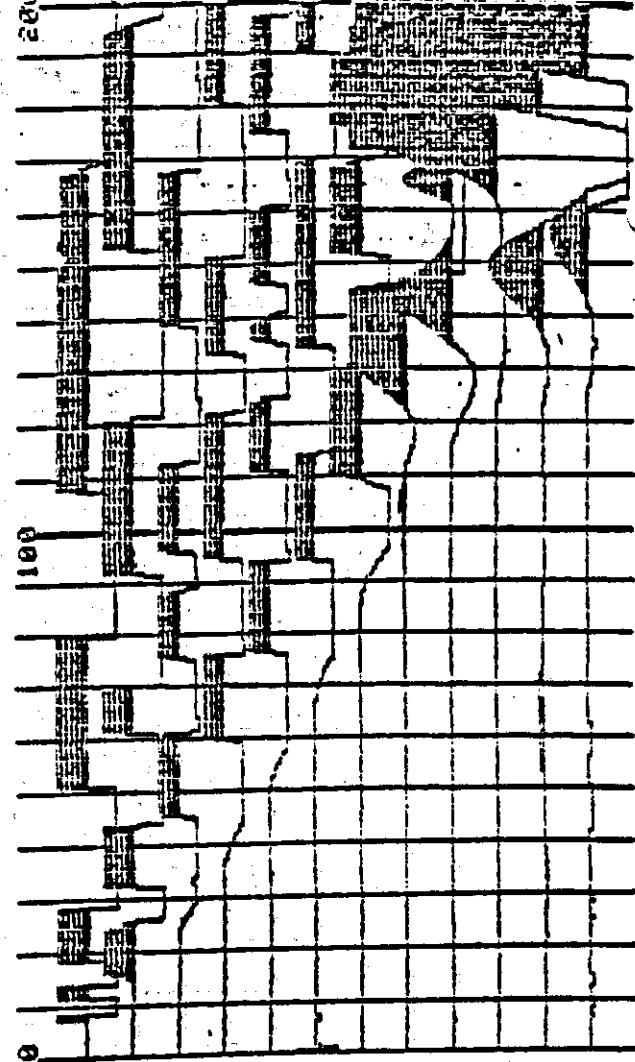
1000 MSEC

DELAY TIME

1000 MSEC

STACK COUNT

FILTER OUT



Sep 20 LF Land fill
inside

AR000615

EGG GEOMETRICS

EST-1225 VERSION 2.0

FILE NO 1463

CH 04 TS

1 60 20

2 60 19

3 60 19

4 60 17

5 60 18

RECORD TIME

0 MSEC

1 60 18

2 60 18

3 60 18

4 60 18

DELAY TIME

0 MSEC

1 60 18

2 60 18

3 60 18

4 60 18

STACK COUNT

1 60 18

2 60 18

3 60 18

4 60 18

5 60 18

FILTER OUT

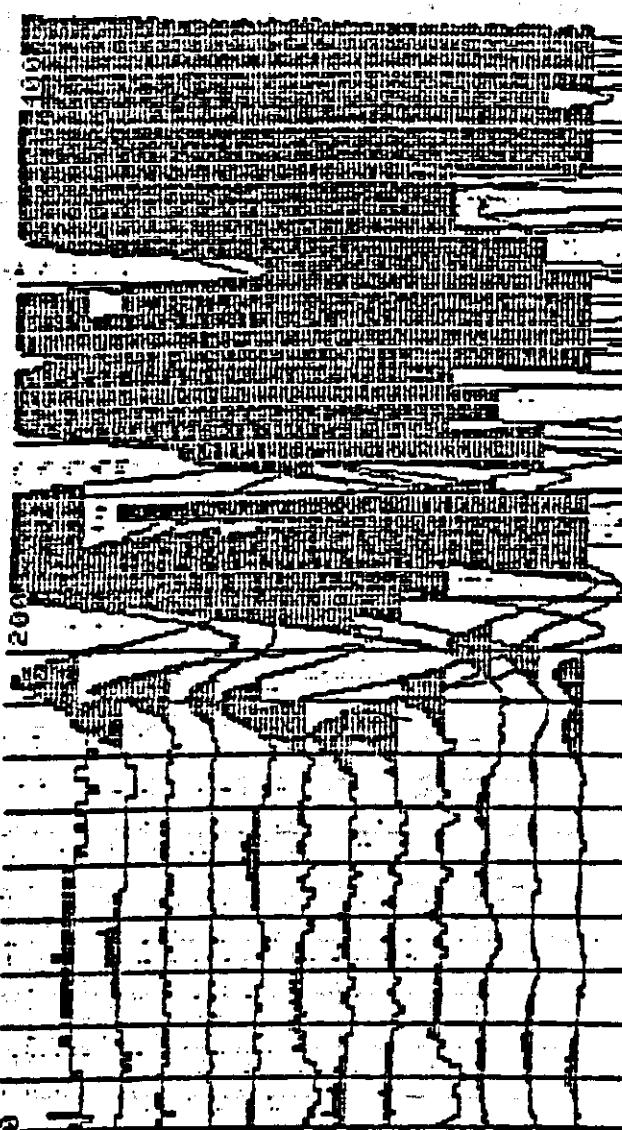
1 60 18

2 60 18

3 60 18

4 60 18

5 60 18



Landfill SP-21 L2

100

200

300

400

500

EGG GEOMETRICS

EST-1225 VERSION 2.0

FILE NO 1463

CH 04 TS

1 60 16

2 60 15

3 60 14

RECORD TIME

0 MSEC

1 60 12

2 60 10

3 60 9

4 60 9

DELAY TIME

0 MSEC

1 60 9

2 60 8

3 60 8

4 60 8

STACK COUNT

1 60 8

2 60 8

3 60 8

4 60 8

5 60 8

FILTER OUT

1 60 8

2 60 8

3 60 8

4 60 8

5 60 8

Landfill SP-21 R

100

200

300

400

500

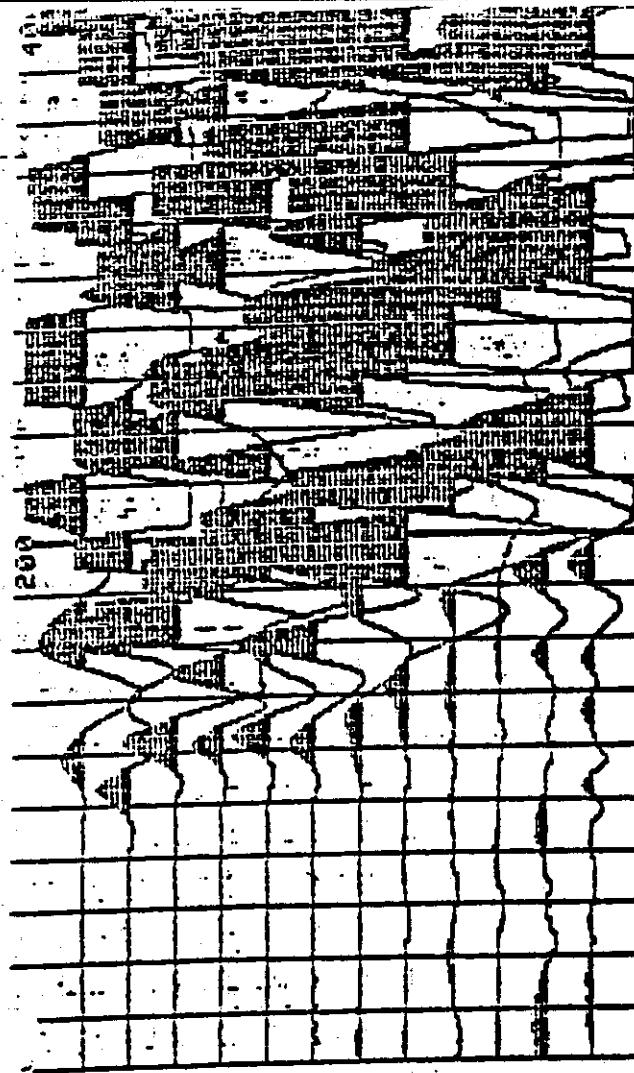
AR000616

000616

EGG GEOMETRICS

EST-125
VERSION 2.0
FILE NO 1463
RECORD TIME 1000 MSEC.
DELAY TIME 0 MSEC.
STACK COUNT 1
FILTER OUT

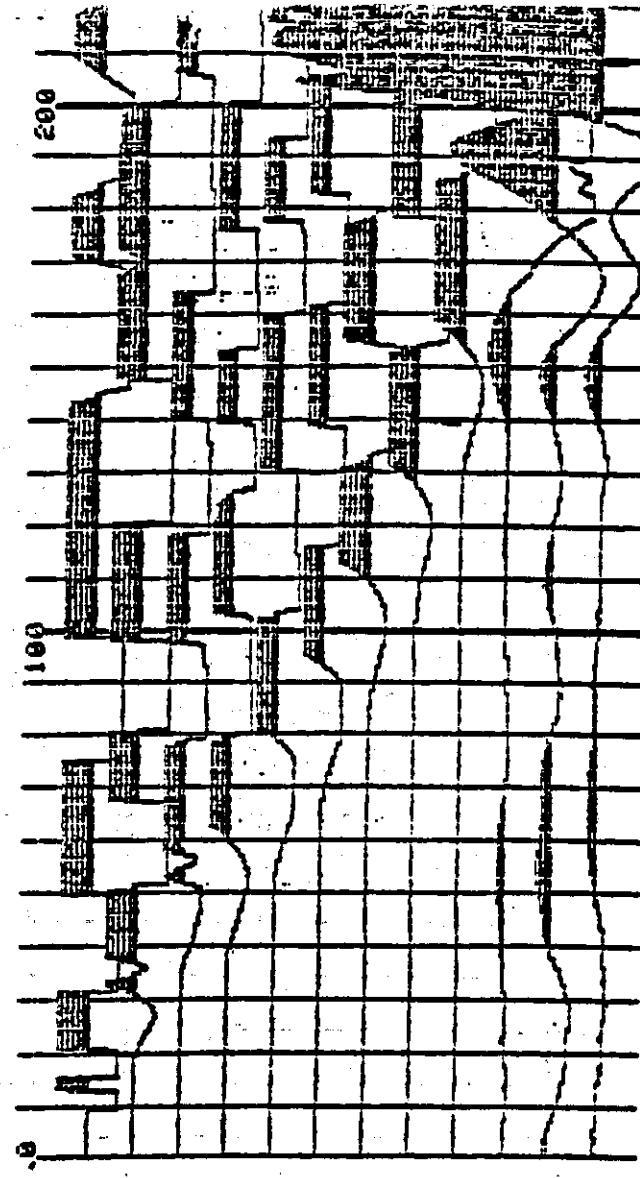
Load file Sp 21 LF
8+17+70 E
6+0 N



EGG GEOMETRICS

EST-125
VERSION 2.0
FILE NO 1463
RECORD TIME 1000 MSEC.
DELAY TIME 0 MSEC.
STACK COUNT 1
FILTER OUT

Load file Sp 21



000617

AR000617

EGG GEOMETRICS

EST-125 VERSION 2.0

FILE NO 1463

RECORD TIME

500 MSEC

DELAY TIME

0 MSEC

STACK COUNT

1

FILTER OUT

12 36 8

*Low fill S. 22P
Arde 000618*

200
100
0CH GN TS
1 60 16

2 60 12

3 60 9

4 60 9

5 60 9

6 60 9

7 60 8

8 60 8

9 54 8

10 48 8

11 42 9

12 36 8

EGG GEOMETRICS

EST-125 VERSION 2.0

FILE NO 1463

RECORD TIME

1000 MSEC

DELAY TIME

0 MSEC

STACK COUNT

1

FILTER

*Desel*200
100
0CH GN TS
1 60 20

2 60 21

3 60 17

4 60 16

5 60 17

6 60 16

7 60 16

8 60 15

9 60 16

10 60 15

11 60 14

12 60 15

EGG GEOMETRICS
 ES-1235
 VERSION 2.0
 FILE NO 1463
 1 36 9
 2 42 9
 3 48 8
 RECORD TIME
 500 MSEC
 4 54 8
 5 60 8
 DELAY TIME
 0 MSEC
 6 60 8
 7 60 11
 8 60 11
 STACK COUNT
 9 60 15
 10 60 15
 11 60 16
 12 60 17
 FILTER OUT

200

160

120

80

40

0

00619

11/22/87
 11:12:00 AM
 11/22/87
 11:12:00 AM

AR000619

EGG GEOMETRICS
 ES-1235
 VERSION 2.0
 FILE NO 1463
 1 60 16
 2 60 16
 RECORD TIME
 1000 MSEC
 3 60 13
 4 60 14
 5 60 14
 DELAY TIME
 0 MSEC
 6 60 14
 7 60 15
 8 60 15
 9 60 16
 10 60 15
 11 60 15
 12 60 16
 FILTER OUT

100

200

80

40

0

5.22 Longfield

EEG GEOMETRICS
ES-1255 VERSION 2.0

FILE NO 1463

RECORD TIME

500 MSEC

DELAY TIME

0 MSEC

STACK COUNT

9 54 8

10 48 8

11 42 9

12 36 8

Sp 23 R

Lanefield

Sp 23 R Lanefield

EEG GEOMETRICS

ES-1255 VERSION 2.0

FILE NO 1463

RECORD TIME

1000 MSEC

DELAY TIME

0 MSEC

STACK COUNT

9 60 14

10 60 15

11 60 15

12 60 14

Sp 23 R

Lanefield

AR000620

EEG GEOMETRICS

Egg Geometrics Version 2.0
FILE NO 14634

RECORD TIME 14634 3 60 11
1089 MSEC.

DELAY TIME 14634 6 60 12
0 MSEC

STACK COUNT 14634 9 60 13

1 10 60 15
11 60 13
12 60 12

FILTER OUT

LF

Sp 23 F Landfall

400
300
200
100

Egg Geometrics

Version 2.0

FILE NO 14634

RECORD TIME

500 MSEC

DELAY TIME

0 MSEC

STACK COUNT

1 36 9

2 42 9

3 48 8

4 54 8

5 60 8

6 60 8

7 60 9

8 60 10

9 60 11

10 60 11

11 60 12

12 60 12

a

1100

2000

3000

AR000621

BOREHOLE GEOPHYSICAL LOGS

AR000622

003622

P.O. Box 17203
Pittsburgh, PA 15235
Telephone (412) 243-3039

APPALACHIAN COAL SURVEYS

LOG HEADING
HOLE NO.
NW - 2D
PAGE 1 OF 4

COMPANY ICF/SRN	LOCATION	UNIT	61 OFFICE CRC	PUB	DATE 13-Apr-88	FT. DRILLING FLUID AIR	DRILLING CO. PA DRILLING	DRILLER	SCALE FT/IN	LOGGING SPEED FT/MIN
PROJECT 30527-012-01 HOLE NO. NW-2D	CLIENT REPRESENTATIVE E. Brown	COUNTY Lehigh PA	STATE PA							
DRILLED DEPTH 100 FT. ELEVATION 100	HOLE DIAMETER 4.0 IN. WATER LEVEL 30 FT.	CASING DEPTH 30 FT.	DIA. THICKNESS 0.05 IN.	IN. FACTOR 101	WALL THICKNESS 0.05 IN.	INTERPRETATION				
RUN #	LOG (DEPTH) FT.	TIME CONSTANT	TIME SOURCE SPACING							
CALIPER	-	γ_m								
1-2	NATURAL	0 - 95	100 CPS 2 SEC NATURAL			COAL < 10% ASH				
1	H.R. DENSITY	6 - 101	1K CPS 1 SEC Am 241 0.5 in.			COAL > 10% ASH				
2	G DENSITY	6 - 101	3K CPS 1 SEC Ro 226 12.0 in.			BONE / CARBONACEOUS SHALE > 50% ASH				
3	NEUTRON	6 - 101	1K CPS 1 SEC Am-B6 12.0 in.			FIRECLAY / HOT SHALE				
	RESISTIVITY	-	J			LIMESTONE / OTHER CARBONATE				
	SPONTANEOUS POTENTIAL	-	MV			SANDSTONE				
	TEMPERATURE	30 - 101	5 °F			SILTY SANDSTONE				
	FLUID CONDUCTIVITY	30 - 101	50 S/cm			SHALE / CLAYSTONE				
	SONIC	-	ms/in			SANDY SHALE / SILTSTONE				
	OTHER	-				GROUNDWATER INFLOW				
						2.0 FT.				
						2.0 FT.				
						2.0 FT.				

NOTES: DATUM IS TOP OF CASING

H.R. DENSITY CALIBRATION 9/88

AR000623

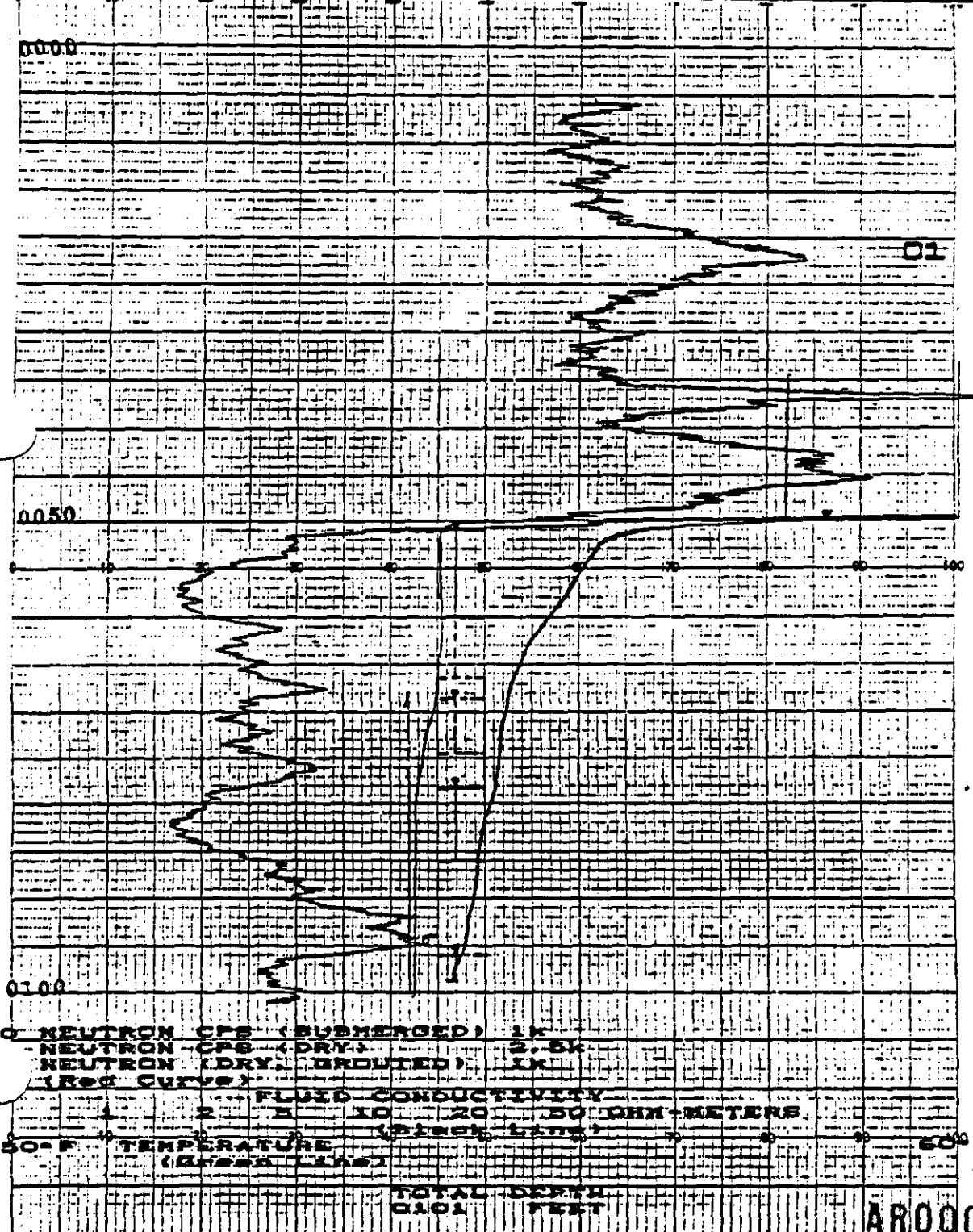
000023

P.O. Box 17203
Pittsburgh, PA 15235
Phone (412) 243-3039

APPALACHIAN COAL SURVEYS

LOG HEADING
HOLE NO.
MW-2D
PAGE 2 OF 4

COMPANY ICP/SRV	LOCATION	UNIT	\$1 OFFICE	PA
PROJECT 30527-012-HOLE NO. MW-2D				
CLIENT REPRESENTATIVE E. Brown	COUNTY LAMBERT	STATE PA	OPERATOR CRC	
DRILLED DEPTH 100 FT. ELEVATION 100 FT.	CASING DEPTH		DATE 12-APR-88	
HOLE DIAMETER 6.0 IN. WATER LEVEL 50 FT.	DIAMETER 4.0 IN. FACTOR 101	WALL THICKNESS BYC IN.	DRILLING FLUID AIR	DRILLING CO. PA DRILLING DRILLER

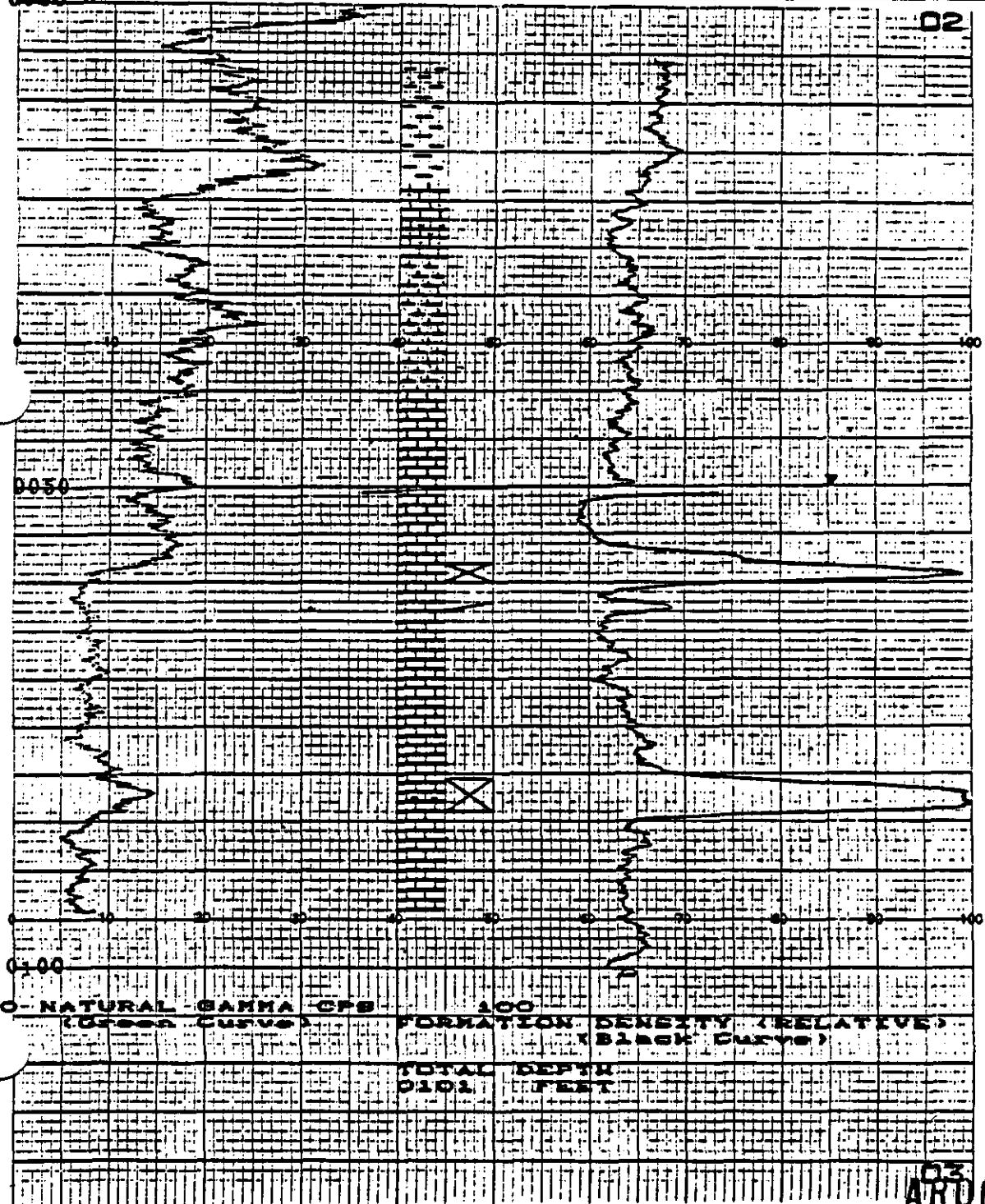


Box 17203
Pittsburgh, PA 15235
Telephone (412) 243-3039

APPALACHIAN COAL SURVEYS

LOG HEADING
HOLE NO.
MW-2D
PAGE 3 OF 4

COMPANY ICP/ERW	LOCATION	UNIT	61 OFFICE	Poh
PROJECT 30327-012-00	HOLE NO. JV-20		OPERATOR CRC	
CLIENT REPRESENTATIVE E. Brown	COUNTY LORAIN	STATE OH	DATE 17-APR-86	
DRILLED DEPTH 100 FT.	ELEVATION FT.	CASING DEPTH FT.	DRILLING FLUID AIR	
HOLE DIAMETER 8.0 IN.	WATER LEVEL 30 FT.	DIAMETER 4.0 IN. FACTOR 102	DRILLING CO. PA DRILLING	DRILLER
WALL THICKNESS BYC IN.				

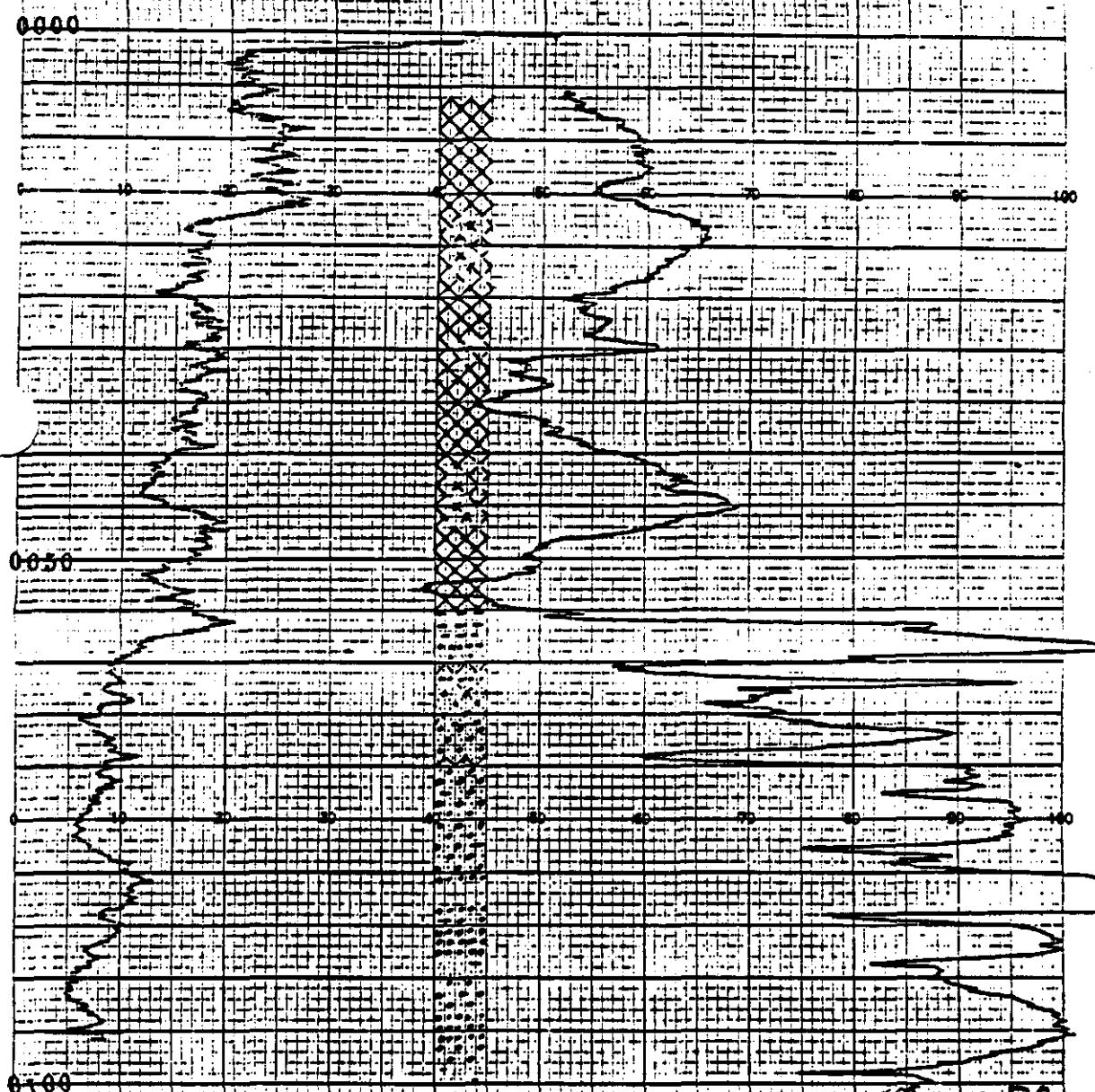


Box 17203
Johnstown, PA 15235
Telephone (412) 243-3039

LOG HEADING
HOLE NO.
MW-2D
PAGE 4 OF 4

APPALACHIAN COAL SURVEYS

COMPANY ICF/SBV	LOCATION	UNIT	61 OFFICE	PON
PROJECT 30527-012-00 HOLE NO. MW-2D	COUNTY Ligonier STATE PA	OPERATOR CRC		
CLIENT REPRESENTATIVE E. Brown		DATE 13-APR-86		
DRILLED DEPTH 100 FT. ELEVATION FT.	CASING DEPTH FT.	DRILLING FLUID AIR		
HOLE DIAMETER 8.0 IN. WATER LEVEL 80 FT	DIAMETER 4.0 IN. FACTOR 101	DRILLING CO. PA DRILLING	DRILLER	
	WALL THICKNESS 3/8 IN.			



NATURAL GAMMA CURVE

100
GROUT DENSITY RELATIVES
(BLACK CURVE)

TOTAL DEPTH FEET

AR000626

P.O. Box 17203
Pittsburgh, PA 15235
Telephone (412) 243-3039

The logo for Appalachian Coal Surveys is a vertical rectangular emblem. It features a black silhouette of the Appalachian mountain range running vertically down the center. To the left of the mountains, the word "APPALACHIAN" is written in a bold, sans-serif font, with the "A" being particularly large. To the right of the mountains, the words "COAL SURVEYS" are written in a similar bold font, with "COAL" stacked above "SURVEYS". The entire logo is rendered in black on a white background.

LOG HEADING
HOLE NO.
HW-3D
PAGE 1 OF 4

NOTES: DATHIN IS THE OF CASING

AR000627

P.O. Box 17203
Pittsburgh, PA 15235
Telephone (412) 243-3039

APPALACHIAN COAL SURVEYS

LOG HEADING
HOLE NO.
MW-3D
PAGE 2 OF 4

COMPANY ICP/SEV		LOCATION		UNIT	61 OFFICE	PA		
PROJECT	HOLE NO.	COUNTY	STATE	OPERATOR				
30527-012	MW-3D	LAMBERT	PA	CBC				
CLIENT REPRESENTATIVE E. Brown					DATE 13-APR-68			
DRILLED DEPTH 100 FT. ELEVATION 100 FT.			CASING DEPTH 97 FT.	DRILLING FLUID AIR				
HOLE DIAMETER 6.0 IN. WATER LEVEL 44 FT.			DIA. 4.0 IN. FACTOR .97	DRILLING CO. PA DRILLING		DRILLER		
WALL THICKNESS 0.05 IN.			SVC					
RUN #	LOG	INTERVAL (DEPTH) FT.	RANGE	TIME CONSTANT	SOURCE	SPACING	INTERPRETATION	RUNS
1000								
0050								OS
00								
0100								
0 NEUTRON (CPS - SUBMERGED)		24						
0 NEUTRON (CPS - DRY)		2.54						
NEUTRON (DRY) BRUTOTED		2X						
(RCG CURVE)								
FLUID CONDUCTIVITY								
2	3	5	10	20	50	GRAMMETERS		
SOIL TEMPERATURE							60°F	
THERMOMETER								
TOTAL DEPTH								
1000								

AR000628

P.O. Box 17203
Pittsburgh, PA 15235
Telephone (412) 243-3039

APPALACHIAN COAL SURVEYS

LOG HEADING
HOLE NO.
MW-3D
PAGE 3 OF 4

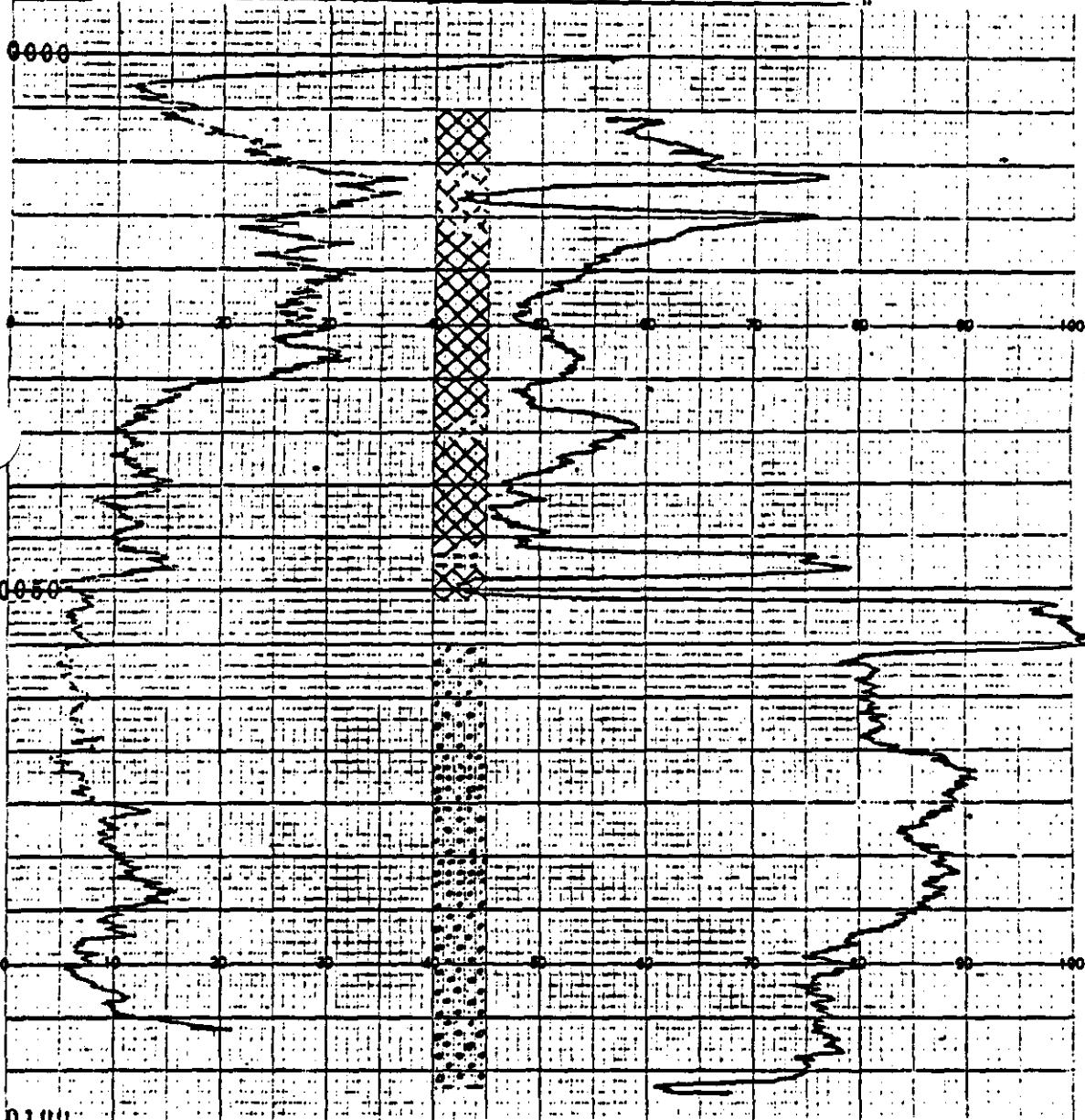
AR000629

P.O. Box 17203
Pittsburgh, PA 15235
Telephone (412) 243-3039

APPALACHIAN COAL SURVEYS

LOG HEADING
HOLE NO.
MW-3D
PAGE 4 OF 4

COMPANY ICP/ERW	LOCATION	UNIT	61 OFFICE Pg
PROJECT 30327-012-0 HOLE NO. SN-30		OPERATOR CBC	
CLIENT REPRESENTATIVE E. Brown	COUNTY Ligon	STATE PA	DATE 13-APR-88
DRILLED DEPTH 100 FT. ELEVATION 100 FT.	CASING DEPTH 97 FT.	DRILLING FLUID AIR	
HOLE DIAMETER 6.0 IN. WATER LEVEL 44 FT.	DIAMETER 6.0 IN. FACTOR 97 FT.	DRILLING CO. DRILLING DRILLER	
RUN # LOG INTERVAL (DEPTH) FT. RANGE TIME CONSTANT	SOURCE SPACING	INTERPRETATION	RUNS



100
GROUT DENSITY (RELATIVE)
BLACK CURVE

100
TOTAL DEPTH
DOES FEET

08

AR000630

P.O. Box 17203
Pittsburgh, PA 15235
Telephone (412) 243-3039



LOG HEADING
HOLE NO.
MW - 4
PAGE 1 OF 4

COMPANY ICF/SRV	PROJECT 30327-012-HOLE NO. MW-4	LOCATION		UNIT	61 OFFICE	Pgh
		COUNTY	STATE			
CLIENT REPRESENTATIVE E. Brown		PA	PA			
DRILLED DEPTH 73 FT.	ELEVATION	FT.	CASING DEPTH	67 FT.	DRILLING FLUID AIR	
HOLE DIAMETER 8.0 IN.	WATER LEVEL	36 FT.	DIA METER 4.0 IN.	WALL THICKNESS 3/4 IN.	DRILLING, CUTTING DRILLER	
LOG #	LOG (DEPTH) FT.	INTERVAL (DEPTH) FT.	RANGE CONSTANT	TIME SOURCE SPACING	INTERPRETATION	RUNS
CALIPER	-	$\frac{1}{10}$ in			COAL < 10% ASH	
NATURAL	0 - 61	100 CPS	2 SEC NATURAL		COAL > 10% ASH	
1 H.R. DENSITY	6 - 67	1k CPS	1 SEC Am 241	0.5 in.	BONE / CARBONACEOUS SHALE > 50% ASH	
2 Ø Ø DENSITY	6 - 67	5k CPS	1 SEC Re 226	12.0 in.	FIRECLAY / HOT SHALE	1 SUR - 67 10 20
3 NEUTRON	6 - 67	1k CPS	1 SEC Am-Ba	12.0 in.	LIMESTONE / OTHER CARBONATE	2 SUR - 67 10 20
RESISTIVITY	-	Λ	MV		SANDSTONE	3 SUR - 67 10 20
SPONTANEOUS POTENTIAL	-				SILTY SANDSTONE	4 SUR - 67 10 20
4 TEMPERATURE	36 - 67	5 °F			SHALE / CLAYSTONE	
4 FLUID CONDUCTIVITY	36 - 67	30 ΩM			SANDY SHALE / SILTSTONE	
SONIC	-	us/in		2.0 FT.	GROUNDWATER INFLOW	
OTHER	-				GROUNDWATER OUTFLOW	

NOTES: DATUM IS TOP OF CASING

6 10 20 30 40 30 20 10 80 90 100
7 25 25 25 25 25 25 25 25 25 25
H.R. DENSITY CALIBRATION g/cc

AR000631

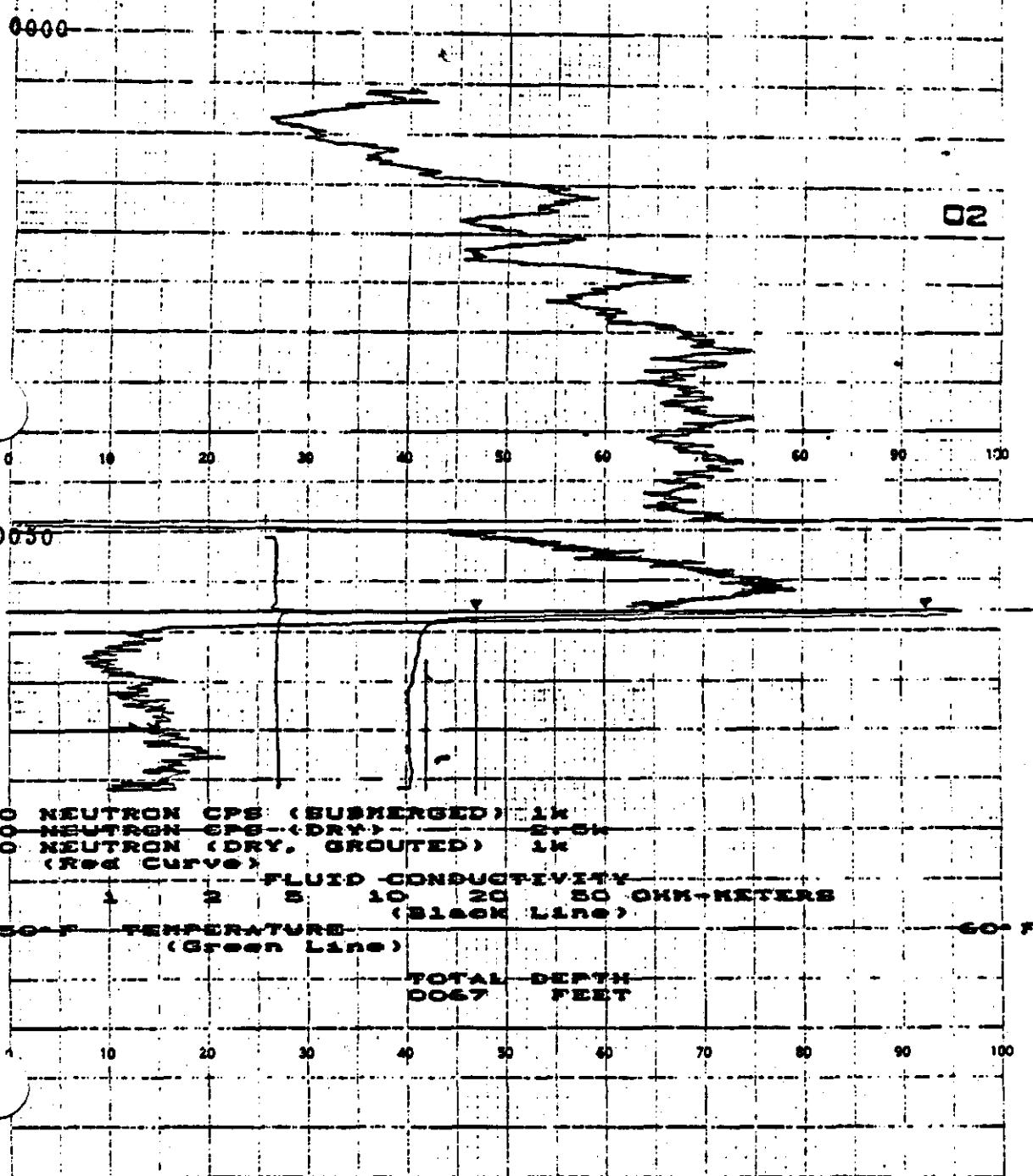
000000

P.O. Box 17203
Pittsburgh, PA 15235
Telephone (412) 243-3039

APPALACHIAN COAL SURVEYS

LOG HEADING
MOLE NO.
MW-4
PAGE 2 OF 4

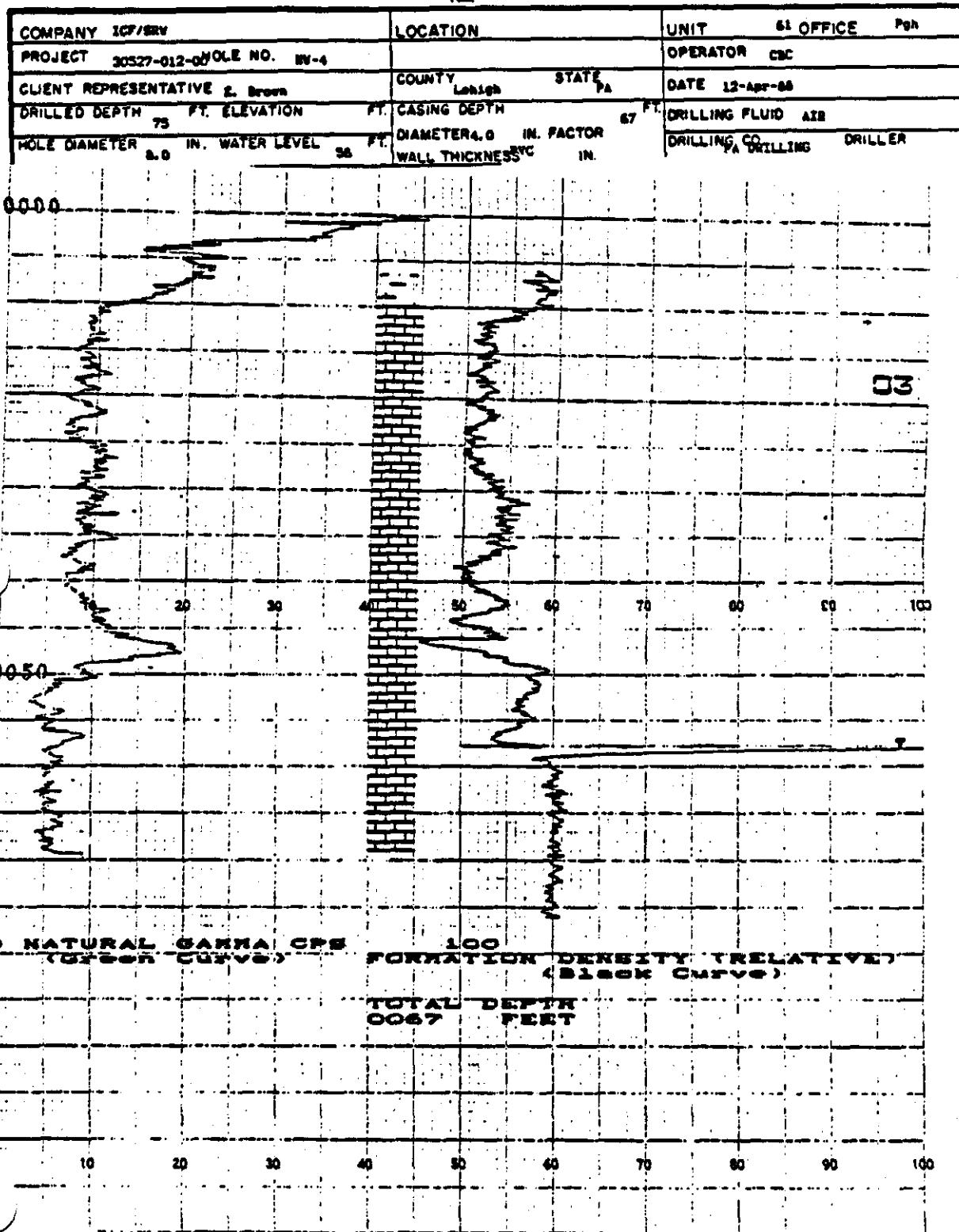
COMPANY ICF/SRV	LOCATION	UNIT	61 OFFICE	Pgh
PROJECT 30527-012-0 HOLE NO. MW-4		OPERATOR CBC		
CLIENT REPRESENTATIVE E. Brown	COUNTY Ligonier STATE PA		DATE 12-Apr-88	
DRILLED DEPTH 75 FT. ELEVATION 75 FT.	CASING DEPTH 67 FT.		DRILLING FLUID AIR	
HOLE DIAMETER 6.0 IN. WATER LEVEL 58 FT.	DIA METER 4.0 IN. FACTOR .67	WALL THICKNESS .75 IN.	DRILLING CO. PA DRILLING	DRILLER



P.O. Box 17203
Pittsburgh, PA 15235
Telephone (412) 243-3039

APPALACHIAN COAL SURVEYS

LOG HEADING
HOLE NO.
MW - 4
PAGE 3 OF 4



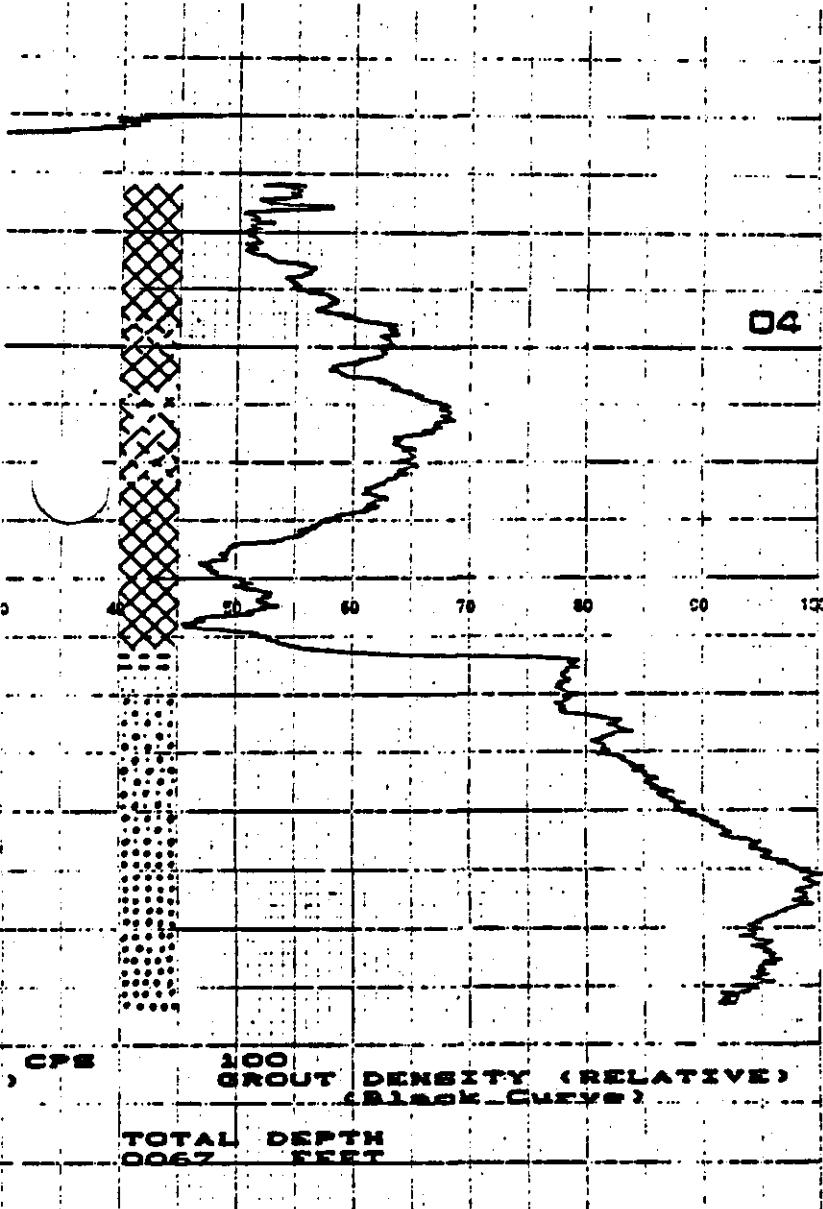
AR000633

APPALACHIAN COAL SURVEYS

LOG HEADING

HOLE NO.
MW-4
PAGE 4 OF 4

	LOCATION	UNIT	61 OFFICE	Pgh
HW-4		OPERATOR	CBC	
COUNTY	Lamington	STATE	PA	DATE 12-Apr-88
N	FT.	CASING DEPTH	67 FT.	DRILLING FLUID AIR
VEL	PT.	DIAMETER 4.0 IN.	FACTOR 67	DRILLING CO. DRILLING DRILLER
56	PT.	WALL THICKNESS .875 IN.		



4	FLUID CONDUCTIVITY	H.R. DENSITY CALIBRATION g/cc									
		10	20	30	40	50	60	70	80	90	100
	SONIC	-	-	-	-	-	-	-	-	-	-
	OTHER	-	-	-	-	-	-	-	-	-	-

NOTES: DATUM IS TOP OF CASING

% CLAY FROM NATURAL S

0 10 20 30 40 50 60 70 80 90 100

2.7 2.5 2.4 2.3 2.2 2.1 2.0 1.9 1.8 1.7 1.6 1.5 1.4 1.3

AR000634

P O Box 17203
Pittsburgh, PA 15239
Telephone (412) 243-3039

APPALACHIAN COAL SURVEYS

LOG HEADING

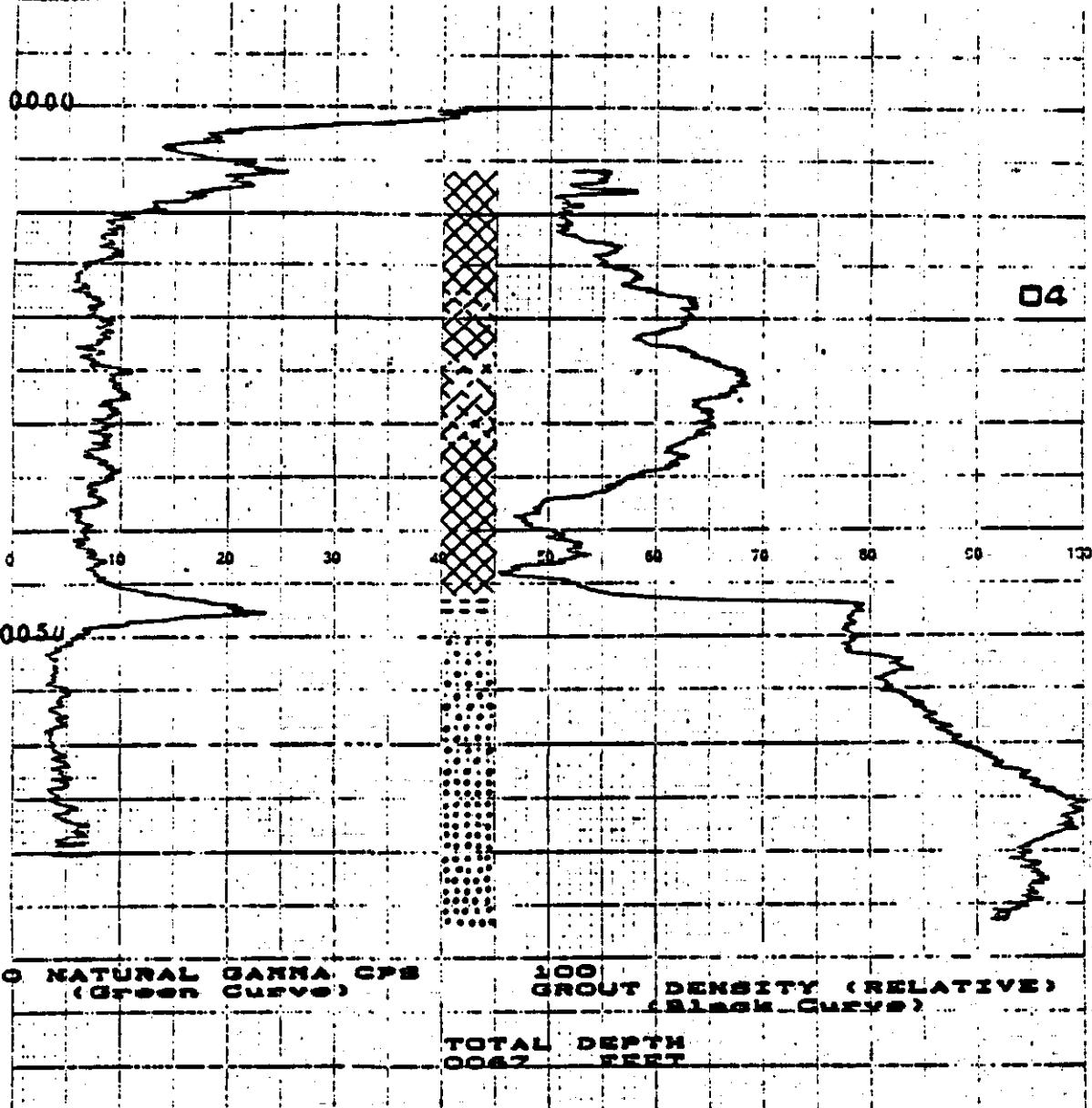
HOLE NO.

MW-4

PAGE 4 OF 4

ORIGINAL
(2nd)

COMPANY ICP/SKIN	LOCATION	UNIT	GL OFFICE	PSB
PROJECT 30527-012-HOLE NO. MW-4		OPERATOR	CBC	
CLIENT REPRESENTATIVE E. Brown	COUNTY Ligon	STATE	PA	DATE 12-Apr-88
DRILLED DEPTH 75 FT. ELEVATION FT.	CASING DEPTH	67 FT.		DRILLING FLUID AIR
HOLE DIAMETER 6.0 IN. WATER LEVEL 38 FT.	DIAMETER 6.0 IN. FACTOR .85	WALL THICKNESS .85 IN.	PA DRILLING CO.	DRILLER

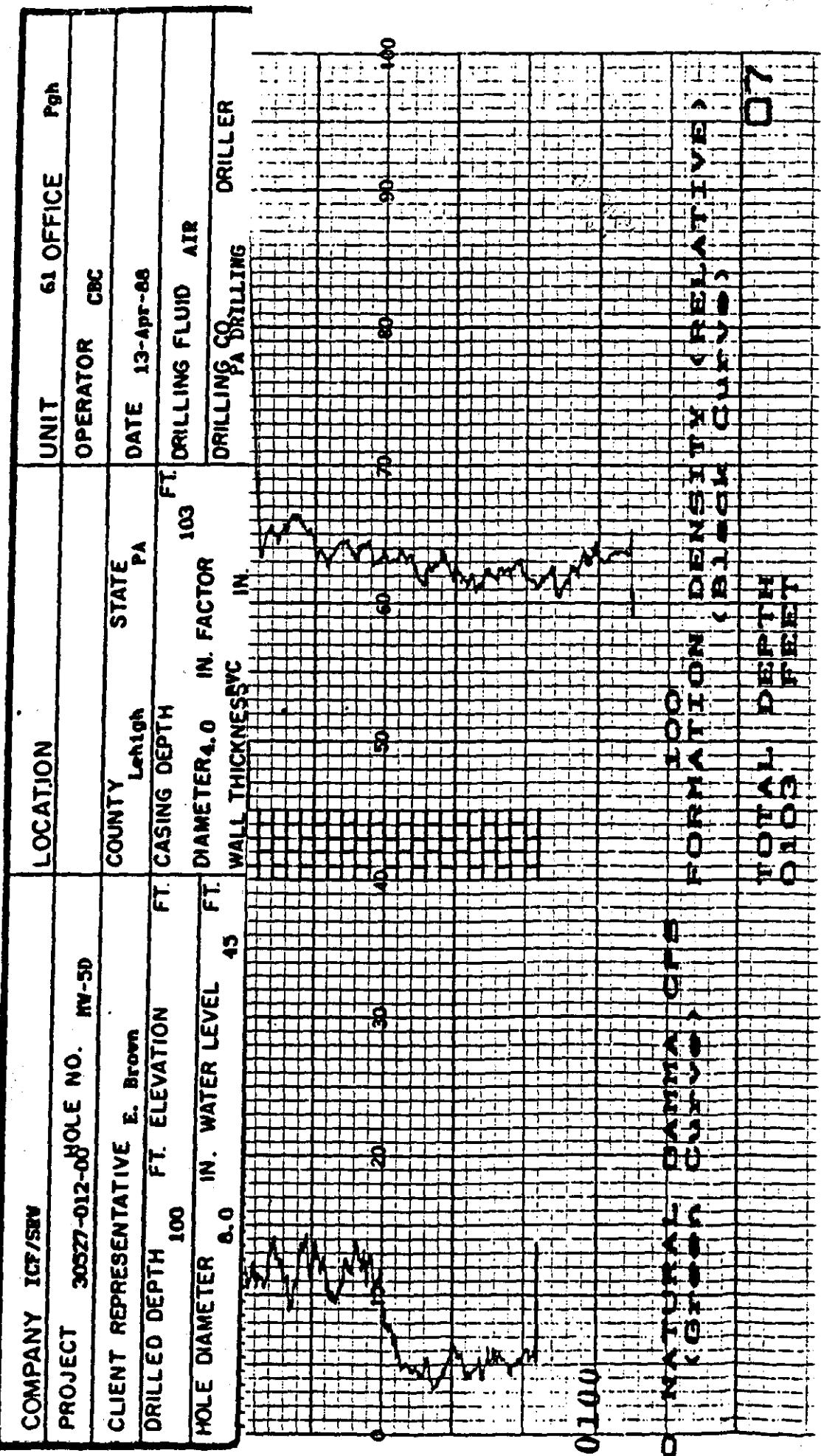


AR000636

P.O. Box 17203
Pittsburgh, PA 15235
Telephone (412) 243-3039

APPALACHIAN COAL SURVEYS

LOG HEADING
HOLE NO.
MW - 5D
PAGE 3 OF 4

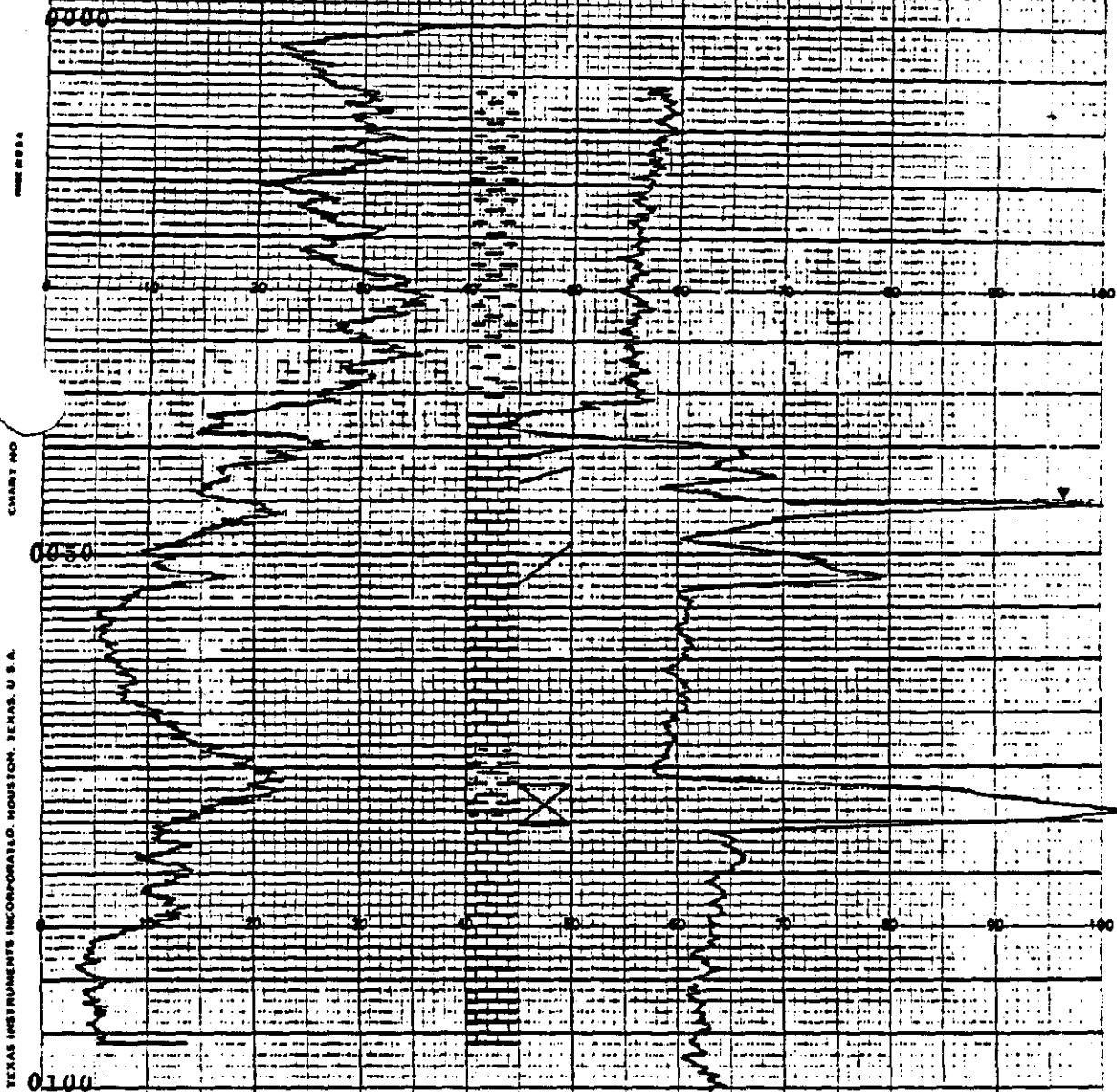


P.O. Box 17203
Pittsburgh, PA 15235
Telephone (412) 243-3039

APPALACHIAN COAL SURVEYS

LOG HEADING
HOLE NO.
MW-SD
PAGE 3 OF 4

COMPANY ICP/ERW	LOCATION	UNIT	61 OFFICE	Pgh
PROJECT 30527-012-00	HOLE NO. MW-SD	OPERATOR CBC		
CLIENT REPRESENTATIVE E. Brown	COUNTY LAMBERT	STATE PA	DATE 13-APR-88	
DRILLED DEPTH 100 FT.	ELEVATION 45 FT.	CASING DEPTH 100 FT.	DRILLING FLUID AIR	
HOLE DIAMETER 6.0 IN.	WATER LEVEL 45 FT.	DIAMETER 6.0 IN. FACTOR 1.00	WALL THICKNESS 0.25 IN.	DRILLING CO. PA DRILLING DRILLER



NATURAL GAMMA RAYS (GAMMA CURVE)	FORMATION DENSITY (RELATIVE) (BLACK CURVE)	TOTAL DEPTH 0103 FEET	0.7

AR000638

P.O. Box 17203
Pittsburgh, PA 15235
Telephone (412) 243-3839

APPALACHIAN COAL SURVEYS

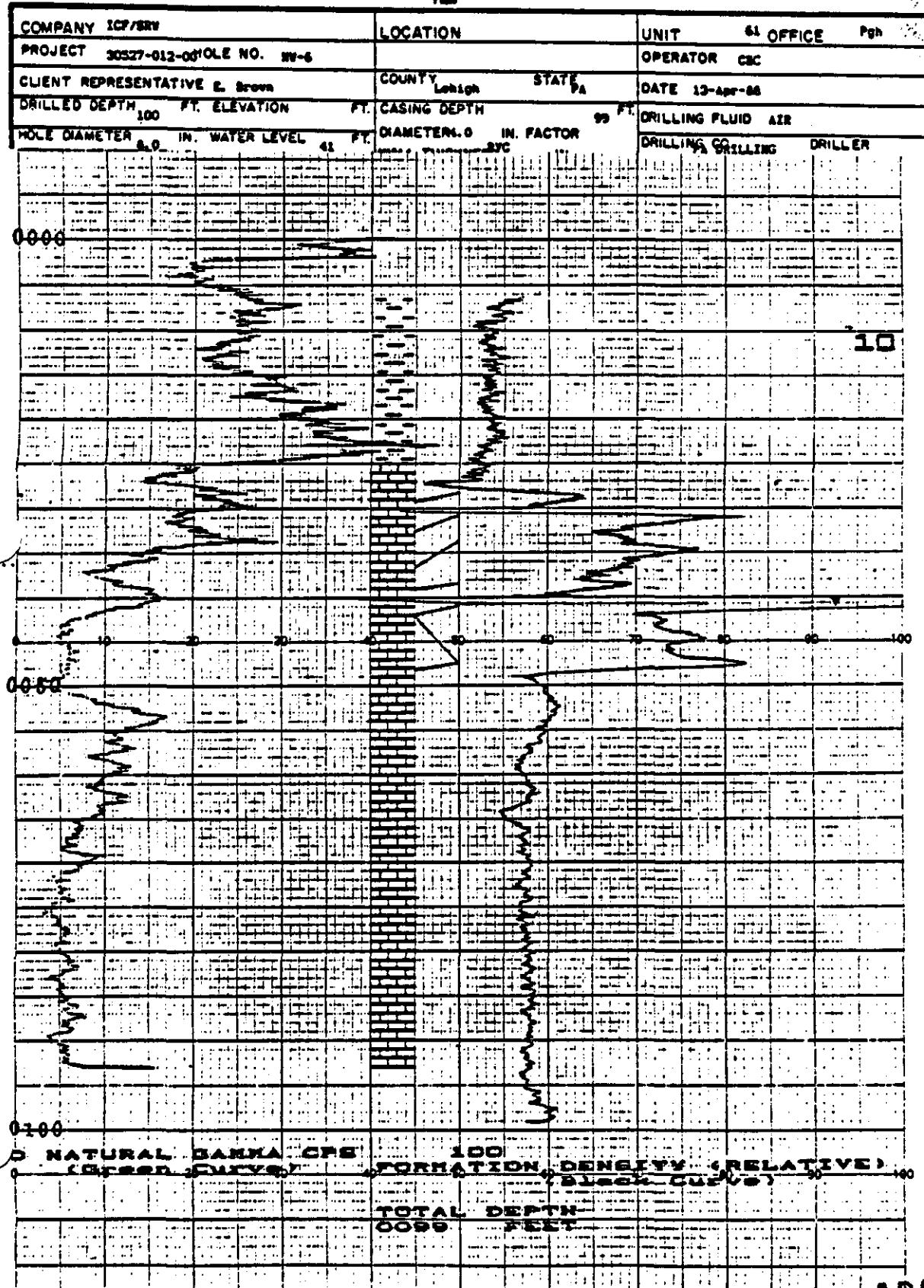
LOG HEADING
HOLE NO.
MW-6
PAGE 2 OF 4

AR000639

O Box 17203
Johnstown, PA 15235
Telephone (412) 243-3039

APPALACHIAN COAL SURVEYS

LOG HEADING
HOLE NO. 1
P.W. -
PAGE 3 OF 4

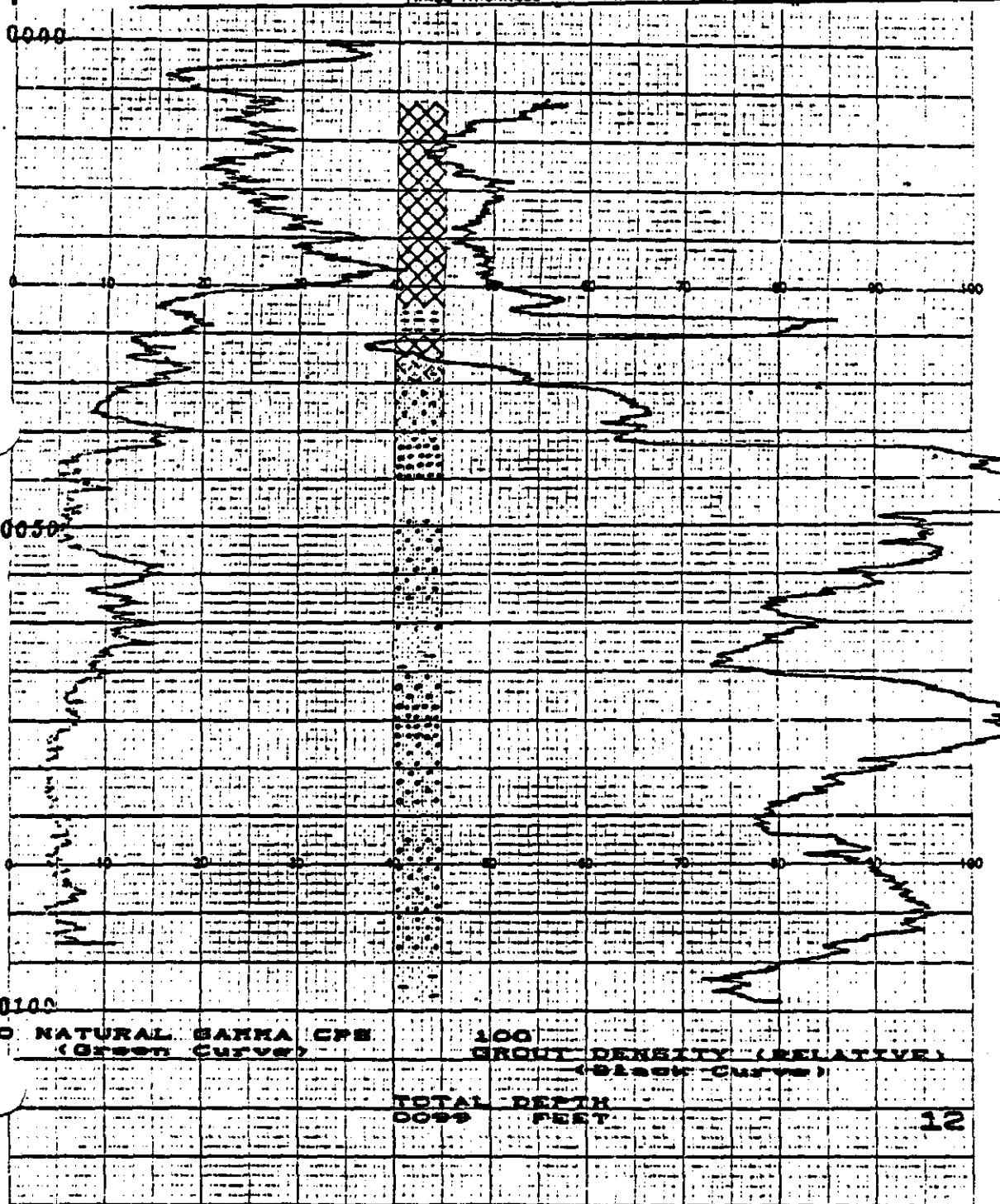


P.O. Box 17203
Pittsburgh, PA 15235
Telephone (412) 243-3009

APPALACHIAN COAL SURVEYS

LOG HEADING
HOLE NO.
MW-6
PAGE 4 OF 4

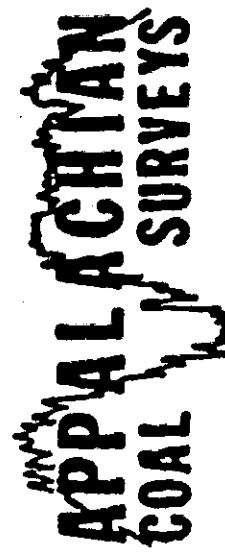
COMPANY ICP/SRV	LOCATION	UNIT	OFFICE CSC	Per
PROJECT 30327-012-00 HOLE NO. 3W-6		OPERATOR	CSC	
CLIENT REPRESENTATIVE E. Brown	COUNTY Ligonier	STATE PA	DATE 12-Apr-86	
DRILLED DEPTH 100 FT. ELEVATION FT.	CASING DEPTH 55 FT.		DRILLING FLUID AIR	
HOLE DIAMETER 6.0 IN. WATER LEVEL 41 FT.	DIA. 6.0 IN. FACTOR .95 PVC		DRILLING DRILLING DRILLER	
	WALL THICKNESS 1 IN.			



卷之三

AR000641

P.O. Box 17203
Pittsburgh, PA 15235
Telephone (412) 243-3039



LOG HEADING
HOLE NO.
MW - 7D
PAGE 1 OF 4

COMPANY ICF/SRN	LOCATION			UNIT	61 OFFICE	Path
PROJECT 30327-012-HOLE NO. MW-7D	COUNTY	STATE	PA	OPERATOR CBC	DATE 12-Apr-88	
CLIENT REPRESENTATIVE E. Brown	FT. ELEVATION	FT. CASING DEPTH	99 FT.	DRILLING FLUID AIR	LOGGING FT/MIN	
DRILLED DEPTH 100	HOLE DIAMETER 8.0 IN.	WATER LEVEL 57 FT.	DIAMETER 4.0 IN. FACTOR 99	DRILLING & SKILLING	SCALE FT/IN	
RUN #	LOG	INTERVAL (DEPTH) FT.	RANGE (CONSTANT)	SOURCE SPACING	INTERPRETATION	RUNS
CALIPER	-	$\frac{1}{10} \gamma_{in}$			COAL < 10% ASH	
NATURAL	0 - 99	100 CPS	2 SEC NATURAL		COAL > 10% ASH	
I.R. DENSITY	6 - 99	1k CPS	1 SEC Am 241	0.3 in.	BONE / CARBONACEOUS SHALE > 50% ASH	
GDX DENSITY	6 - 99	5k CPS	1 SEC Re 226	12.0 in.	FAECLAY / HOT SHALE	1 SUR - 99 10 20
3 NEUTRON	6 - 99	1k CPS	1 SEC Am-B6	12.0 in.	LIMESTONE / OTHER CARBONATE	2 SUR - 99 10 20
RESISTIVITY	-	Δ	MV		SANDSTONE	3 SUR - 99 10 20
SPONTANEOUS POTENTIAL	-	MV			SILTY SANDSTONE	4 SUR - 99 10 20
4 TEMPERATURE	37 - 99	5 °F			SHALE / CLAYSTONE	
4 FLUID CONDUCTIVITY	37 - 99	50 μ M			SANDY SHALE / SILTSTONE	
SONIC	-	w/f	2.0 FT.		GROUNDWATER INFLOW	
OTHER	-				GROUNDWATER OUTFLOW	

NOTES: DATUM IS TOP OF CASING

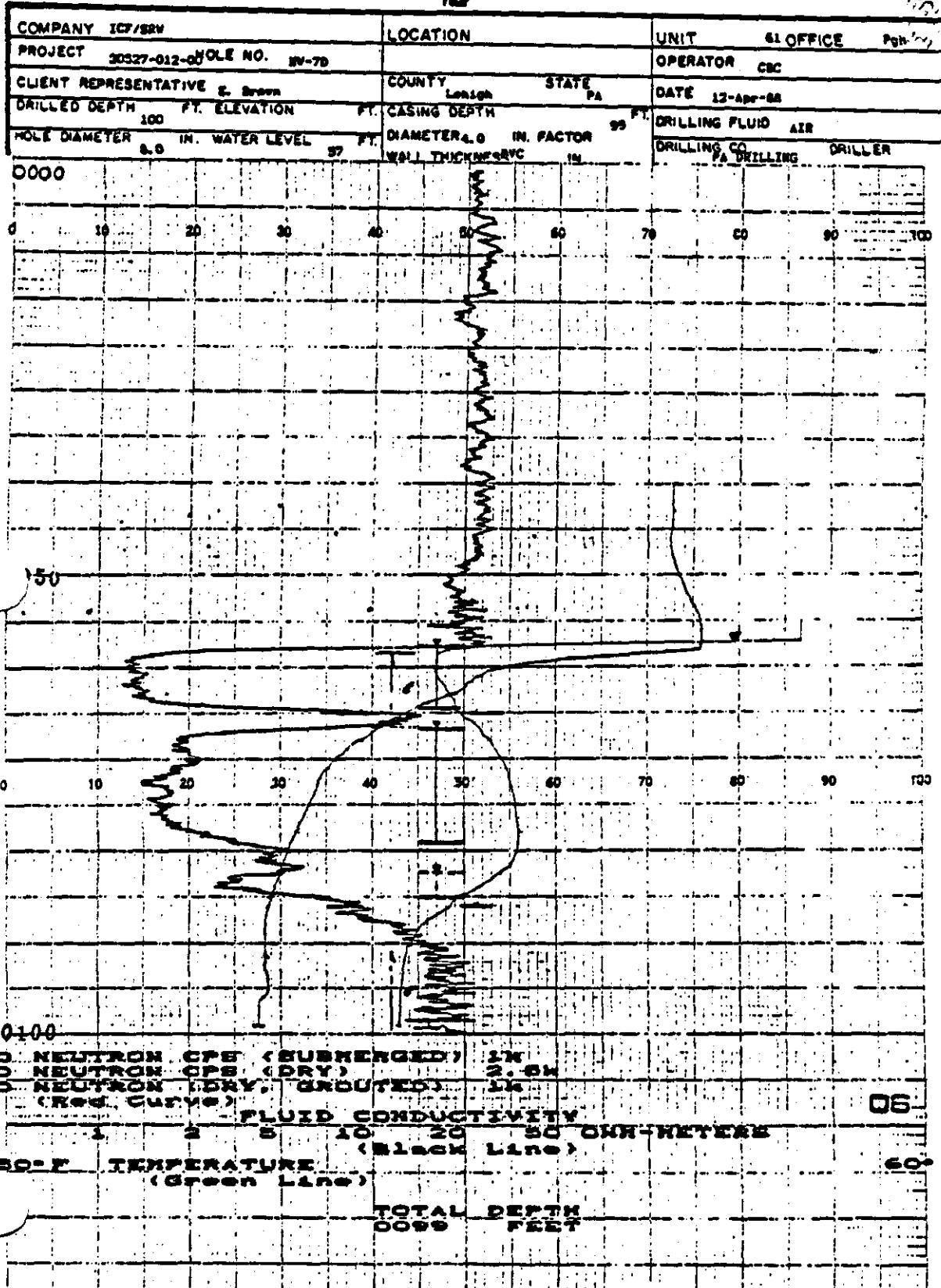
% CH FROM NATURAL 0
2.7 2.9 2.5 2.4 2.3 2.2 2.1 2.0 1.9 1.8 1.7 1.6 1.5 1.4 1.3

AR000642

P.O. Box 17203
Pittsburgh, PA 15235
Telephone (412) 243-3039

APPALACHIAN COAL SURVEYS

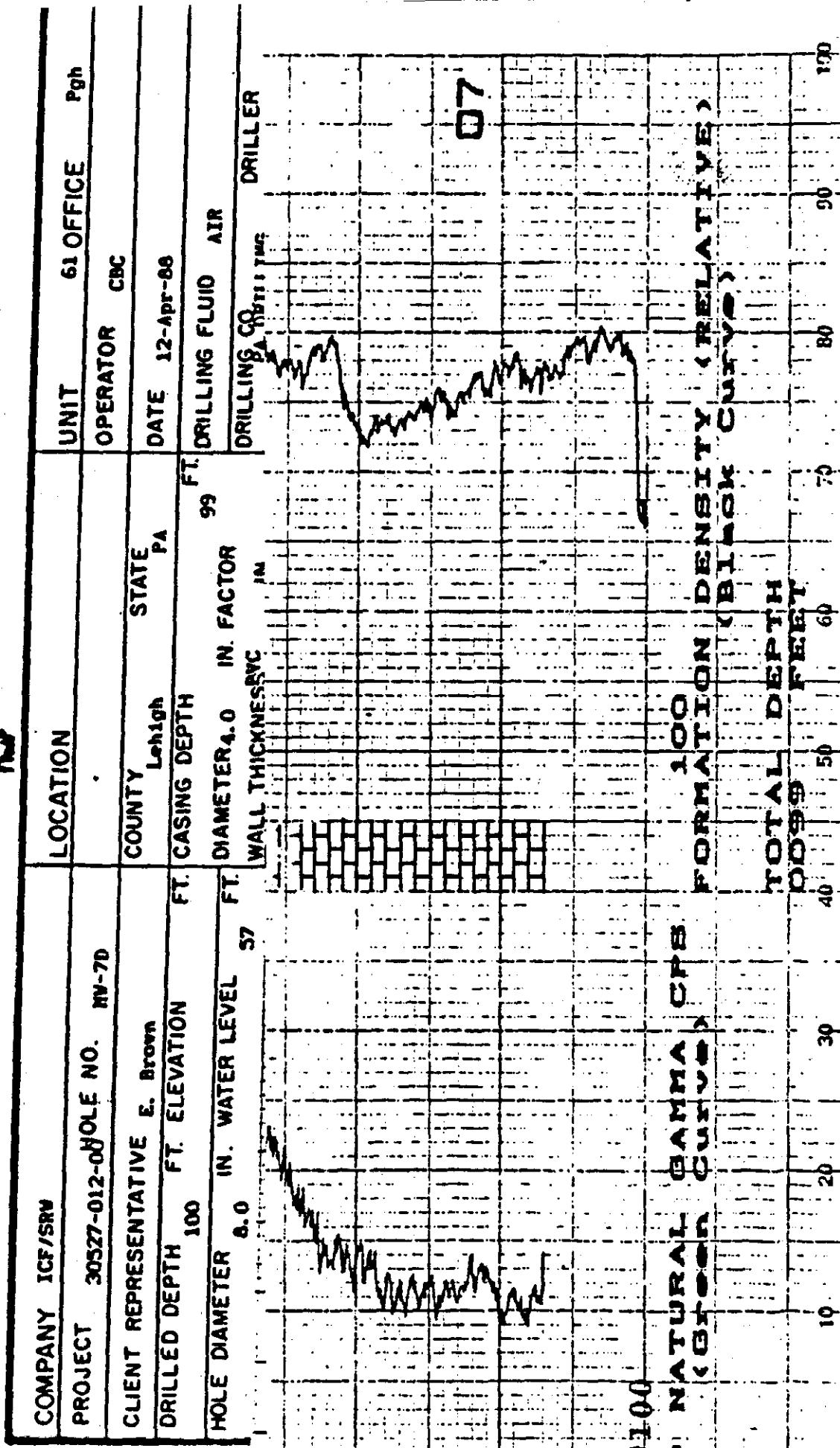
LOG HEADING
HOLE NO.
MW-7D
PAGE 2 OF 4



P.O. Box 17203
Pittsburgh, PA 15235
Telephone (412) 243-3039

APPALACHIAN COAL SURVEYS

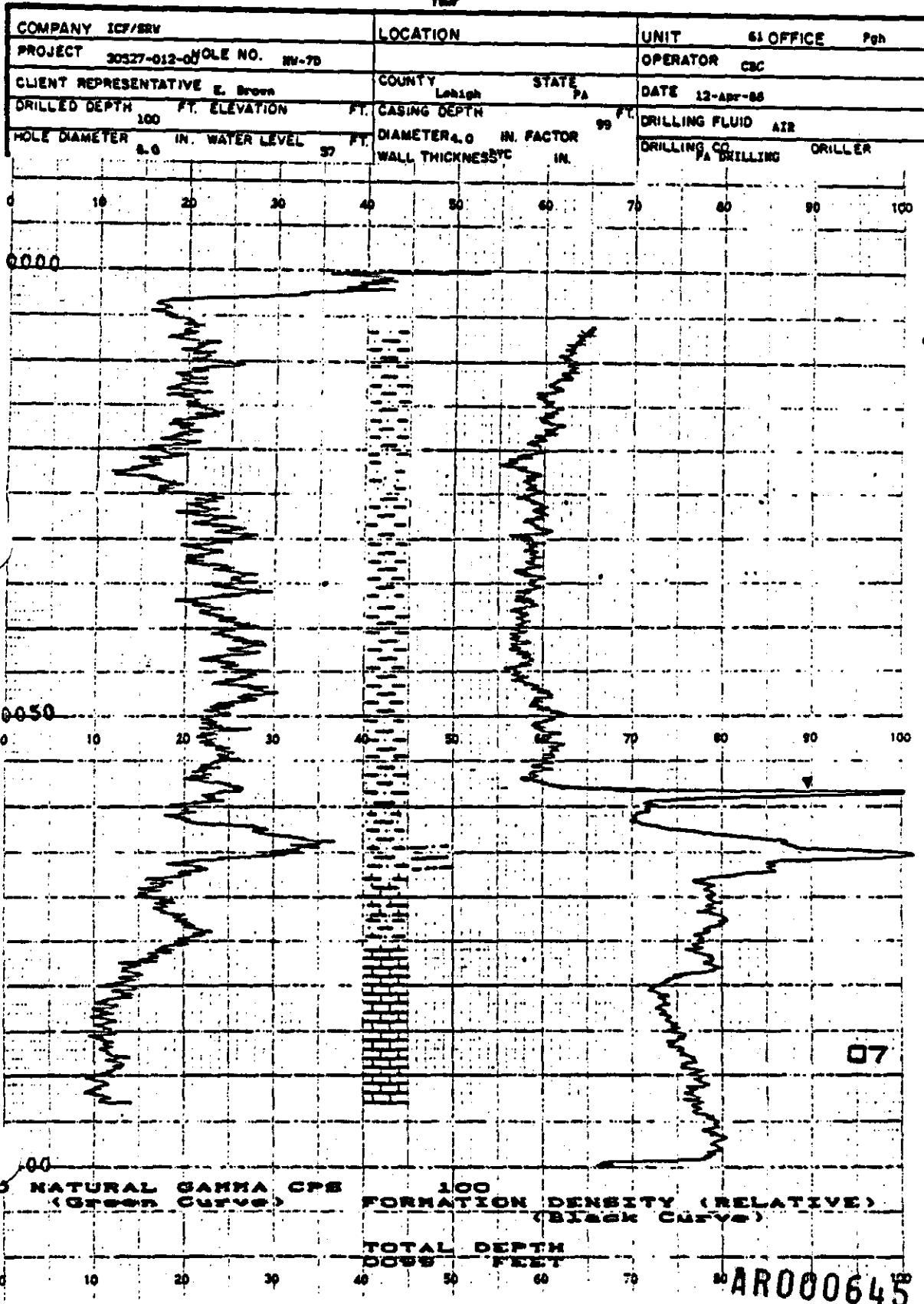
LOG HEADING
HOLE NO.
MW - 7D
PAGE 3 OF 4



P.O. Box 17203
Pittsburgh, PA 15235
Telephone (412) 243-3039

APPALACHIAN COAL SURVEYS

LOG HEADING
HOLE NO.
MW-7D
PAGE 3 OF 4

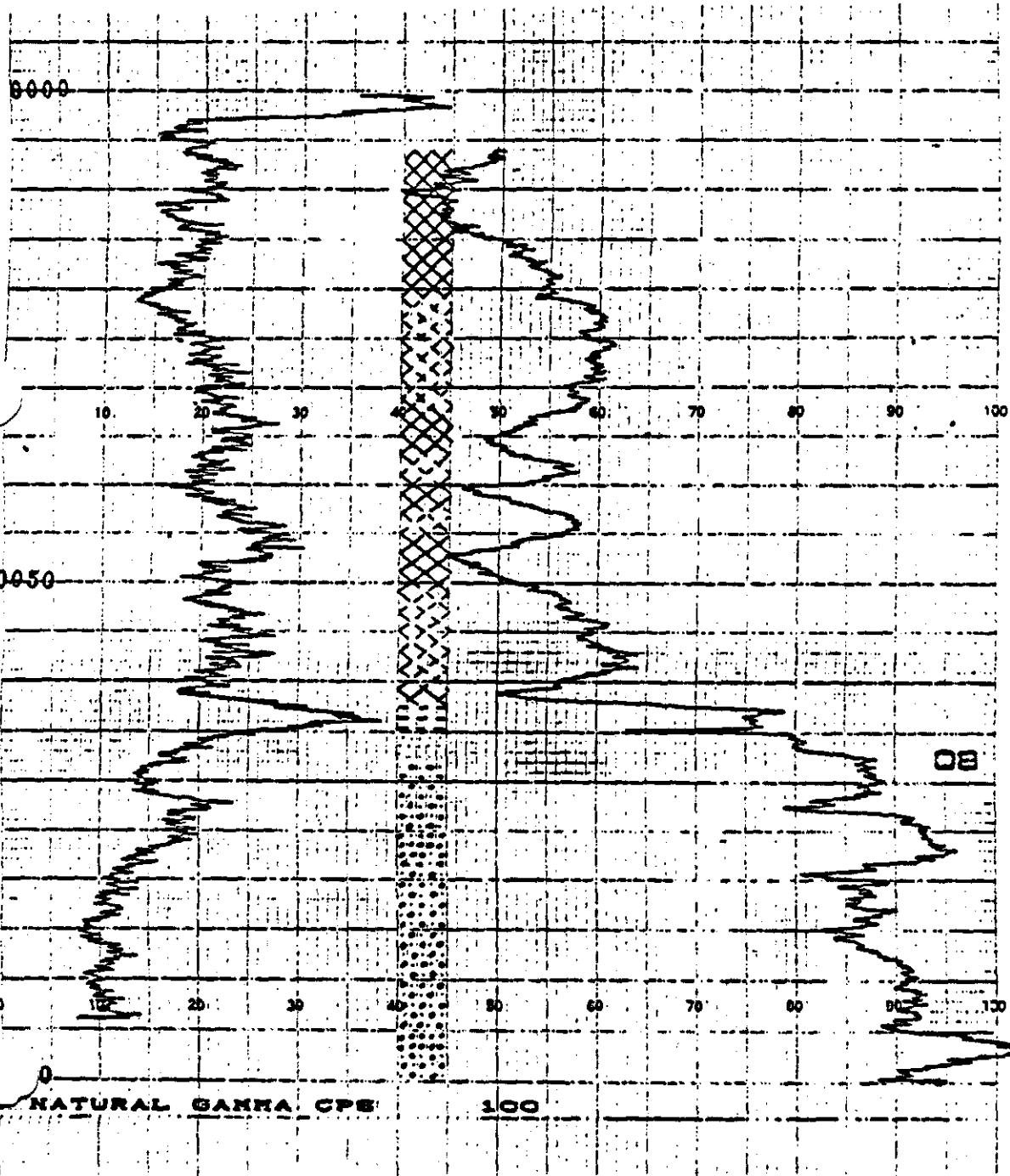


P.O. Box 17203
Pittsburgh, PA 15235
Telephone (412) 243-3039

APPALACHIAN COAL SURVEYS

LOG HEADING
HOLE NO.
MW-7D
PAGE 4 OF 4

COMPANY ICP/SRV	LOCATION	UNIT	AS OFFICE Pgh
PROJECT 30527-012-HOLE NO. MW-7D		OPERATOR O/CBC	
CLIENT REPRESENTATIVE E. BEHN	COUNTY Ligon	STATE PA	DATE 12-APR-88
DRILLED DEPTH 100 FT. ELEVATION	FT.	CASING DEPTH 99 FT	DRILLING FLUID AIR
HOLE DIAMETER 6.0 IN. WATER LEVEL 57 FT	FT.	DIAMETER 4.0 IN. FACTOR .99	DRILLING CO. PA DRILLING DRILLER
		WALL THICKNESS .85 IN.	



P.O. Box 17203
Pittsburgh, PA 15235
Telephone (412) 243-3039

APPALACHIAN COAL SURVEYS

LOG HEADING
HOLE NO.
MW - 75
PAGE 1 OF 4

COMPANY ICF/SRV		LOCATION		UNIT	61 OFFICE	PAh
PROJECT	HOLE NO.	COUNTY	STATE	OPERATOR	CSC	
30527-012-00	MW-75	Luzerne	PA			
CLIENT REPRESENTATIVE E. Brown						
DRILLED DEPTH 35 FT. ELEVATION 35		CASING DEPTH FT.				
HOLE DIAMETER 6.0 IN. WATER LEVEL 49 FT.		DIA. 4.0 IN.	IN. FACTOR 35		DRILLING FLUID AIR	
		WALL THICKNESS 1/8 IN.	DRILLING CO. PA DRILLING	DRILLER		
RUN #	LOG	INTERVAL (DEPTH) FT.	RANGE	TIME CONSTANT	SOURCE SPACING	INTERPRETATION
	CALIPER	-	17.5M			
	NATURAL	-	CPS	SEC NATURAL		
	H.R. DENSITY	-	CPS	SEC Am 241	IN.	
	Ø DENSITY	-	CPS	SEC Re 226	IN.	
1	NEUTRON	6 - 35	1K CPS	2 SEC	Am-Be 12.0 in.	
	RESISTIVITY	-	SL			
	SPONTANEOUS POTENTIAL	-	MV			
2	TEMPERATURE	49 - 35	3 op			
2	FLUID CONDUCTIVITY	49 - 35	30 ohm			
	SONIC	-	ms/in		2.0 FT.	
	OTHER	-				
NOTES: DATUM IS TOP OF CASING						
H.R. DENSITY CALIBRATION 9/66						
% CLAY FROM NATURAL %						
0	10	20	30	40	50	60
2.7	2.6	2.5	2.4	2.3	2.2	2.1
2.0	1.9	1.8	1.7	1.6	1.5	1.4
1.3						
0.50						
0.4						
0.3						
0.2						
0.1						
0.0						
0.50						
0.4						
0.3						
0.2						
0.1						
0.0						
0.50						
0.4						
0.3						
0.2						
0.1						
0.0						
0.50						
0.4						
0.3						
0.2						
0.1						
0.0						
0.50						
0.4						
0.3						
0.2						
0.1						
0.0						
0.50						
0.4						
0.3						
0.2						
0.1						
0.0						
0.50						
0.4						
0.3						
0.2						
0.1						
0.0						
0.50						
0.4						
0.3						
0.2						
0.1						
0.0						
0.50						
0.4						
0.3						
0.2						
0.1						
0.0						
0.50						
0.4						
0.3						
0.2						
0.1						
0.0						
0.50						
0.4						
0.3						
0.2						
0.1						
0.0						
0.50						
0.4						
0.3						
0.2						
0.1						
0.0						
0.50						
0.4						
0.3						
0.2						
0.1						
0.0						
0.50						
0.4						
0.3						
0.2						
0.1						
0.0						
0.50						
0.4						
0.3						
0.2						
0.1						
0.0						
0.50						
0.4						
0.3						
0.2						
0.1						
0.0						
0.50						
0.4						
0.3						
0.2						
0.1						
0.0						
0.50						
0.4						
0.3						
0.2						
0.1						
0.0						
0.50						
0.4						
0.3						
0.2						
0.1						
0.0						
0.50						
0.4						
0.3						
0.2						
0.1						
0.0						
0.50						
0.4						
0.3						
0.2						
0.1						
0.0						
0.50						
0.4						
0.3						
0.2						
0.1						
0.0						
0.50						
0.4						